1	UNITED STATES DISTRICT COURT
2	DISTRICT OF MASSACHUSETTS
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6	* * * * * * * * * * * * * * * * * * *
7	Plaintiff * * CIVIL ACTION
8	Vs. * No. 16-11613-RGS *
9	CISCO SYSTEMS, INC., * Defendant
10	* * * * * * * * * * * * * *
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14	BEFORE THE HONORABLE RICHARD G. STEARNS
15	UNITED STATES DISTRICT COURT JUDGE AND A JURY
16	CIVIL JURY TRIAL DAY 1 August 2, 2022
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18	
19	Courtroom No. 21
20	1 Courthouse Way Boston, Massachusetts 02210
21	
22	JAMES P. GIBBONS, CSR, RPR, RMR
23	DEBRA JOYCE, CSR, RPR, CRR, FCRR CHERYL PALANCHIAN, RPR, RMR, CRR
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                               PROCEEDINGS
                  THE CLERK: All rise.
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          (Whereupon, the Court entered the courtroom.)
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                  THE CLERK: This is Civil Action No. 16-11613,
     5
         Egenera, Inc., versus Cisco Systems, Inc.
         Could I please ask the jury panel to hold up your right hand.
     7
         (Venire sworn.)
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                  THE CLERK: Thank you. You may be seated.
     9
         Would counsel please identify themselves for the record.
09:42 10
                  MR. THOMASES: Good morning, your Honor.
    11
         Andrew Thomases of Ropes & Gray on behalf of the plaintiff,
    12
         Egenera.
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         With me is my partner, Jim Batchelder.
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                  MR. BATCHELDER: Good morning, your Honor.
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                  MR. THOMASES: And we also have a member of the Board
    16
         of Egenera, Jim Phillips.
                  MR. PHILLIPS: Good morning, your Honor.
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                  MR. THOMASES: We also have assisting in this part of
    19
         the phase Ms. Ellen Brickman.
09:42 20
                  MS. BRICKMAN: Good morning, your Honor.
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                  MR. THOMASES: And Emma Notis-McConarty.
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                  MS. NOTIS-McCONARTY: Good morning, your Honor.
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                  MR. PACKIN: Good morning, your Honor. Tamir Packin
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         from Desmarais LLP on behalf of Cisco Systems, Inc.
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         With me I have my partner, John Desmarais.
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                  MR. DESMARAIS: Good morning, your Honor.
                  MR. PACKIN: And also assisting this morning we have
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         Toni Blake and Gwen Brons.
     3
          (Jury impanelment not transcribed.)
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                   THE COURT: Congratulations. I hope you're all
         comfortable. Take a deep breath because you're the winners.
     7
          (Laughter.)
     8
                   THE COURT: You will be the jury that will hear and
     9
         decide this case.
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         Would everyone stand, please, while the jury is sworn to its
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         office.
    12
                   THE CLERK: Can I ask the jurors in the box to raise
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         your right hand.
    14
                                    JURY, sworn.
                   THE COURT: All right. Those of you who,
    15
         unfortunately, were not selected for this trial, I would like
    16
         you to report back to the jury room downstairs. I hope there
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    18
         is another judge who would like to see you in his or her
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         courtroom.
         But whatever happens for the balance of day, you should be very
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    21
         proud of yourselves for having appeared here and being shown as
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         willing to serve.
    23
         We have two rights, really privileges, as Americans. We get to
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         vote, but you don't really have to. You serve as a juror, but
    25
         you kind of have to. Those are the only two things -- and
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         paying taxes -- what we get called on to do. But I think all
         of them, to my mind jury service is by far the most important
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         because we could not have a justice system without you.
     3
         So those jurors not chosen, please report back to the jury
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     5
         room.
          (Remaining venire excused.)
     7
                   THE COURT: All right. Marsha is going to show you
     8
         the jury room that will be at your disposal during the trial,
         and give you a chance, I know you don't know one another, to
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         introduce yourselves. She will explain the cell phone policy
    11
         and a few other things.
    12
         When we come back, because I know this is new for most of you,
         I have some words by way of introduction to help prepare you
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         for what to expect over the course of the trial. When I
         finish, we'll go right to the opening statements by counsel.
    15
         But let's take a 25-minute break so that Marsha can speak with
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         the jurors.
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                   THE CLERK: All rise.
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    19
          (Whereupon, the jury left the courtroom.)
                  MR. DESMARAIS: Defendant is satisfied.
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                  MR. THOMASES: Plaintiff is satisfied.
    22
          (Recess.)
    23
                   (Jury entered the courtroom.)
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                   THE CLERK: Resuming on the record in Civil Action
    25
         No. 16-11613, Egenera, Inc. v. Cisco Systems, Inc.
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Thank you. You may be seated.

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THE COURT: All right, jurors. Now that you have been sworn, I want to give you some preliminary instructions regarding your participation in the trial.

As the jury, it is your duty to find the facts of the case from the evidence that will be presented. You and you alone are the judges of those facts. You will then have to apply to those facts the law as I will explain it to you, and you must follow my instructions on the law, whether you personally agree with the wisdom of the law or not.

The evidence in which you will find the facts consists of the testimony of witnesses, documents and other things admitted as exhibits, as well as any facts that the lawyers agree to, or, as they would say, stipulate to. We have a few of those stipulations, but mostly as to dates and numbers, and I've printed those for you. When I finish, I'll see that you each get a copy of it, because I think you'll find it a useful memory aid in terms of some critical times and numbers in the case.

We may hear some testimony in the form of a deposition. A deposition is sworn testimony taken from a witness prior to trial. At a deposition, both sides are present and both sides are permitted to ask questions. It may be considered, therefore, just as if the witness had appeared here in court to testify because the full cross-examination

will take place on the record.

Lawyers may also from time to time refer to something called an answer to an interrogatory. In a civil case, each side is permitted to ask a limited number of questions of the other. These are in writing, and we call them interrogatories. The answers to these interrogatories become binding on the party who gives the answer.

Certain things are not evidence and should not be considered by you in reaching your verdict. Let me list them for you now.

Statements, arguments, and questions by lawyers are not evidence. What the lawyers have to say will be helpful in setting context, may even be persuasive to you in terms of the inferences you ultimately draw, but that is not the evidence. The evidence is what you determine from what the witnesses say and what the exhibits demonstrate to you.

Objections to questions are not evidence. Lawyers have an obligation to their clients to make an objection when they believe that evidence is being offered improperly under our rules. You should not be influenced by the objection or by the way I rule on it. If I sustain the objection, ignore the lawyer's question and any assertion of fact the question might contain. If I overrule the objection, treat the witness' answer as you would any other.

Testimony that I exclude or instruct you to disregard

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is not evidence and should not be considered by you in reaching your verdict. If I instruct you that an item of evidence is received for a limited purpose, you may only consider it for the purpose that I define.

Now, occasionally an item will be marked for identification and given a letter like A for identification.

We do that so there will be some record of the item in the official record of the trial, but if an item offered for identification is not later accepted as an exhibit and given a number in lieu of a letter, it is not evidence and will not be with you in the jury room for your consideration.

Anything that you see or hear outside of the courtroom during the trial is not evidence and should be disregarded.

There are two kinds of evidence at a trial, direct evidence and then there is so-called circumstantial evidence, a term that you've all heard and do not have a ready definition for.

Direct evidence is direct proof of a fact, usually presented through the testimony of a person who claims to have been an eyewitness to an event or a participant in a conversation. When you evaluate direct evidence, the issue is pretty straightforward: Do you believe that what the witness has told you is accurate? Circumstantial evidence, on the other hand, is proof of a chain of circumstances or a set of facts in which you could infer or conclude that another fact is

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true even though you have no direct evidence of that fact.

If I can give a simple example: Assume that when Mr. Maynard arrived for work this morning, he did not find me in my office, but he did find my lights on, my coat hanging in the closet, the work I had taken home last night spread out on my desk with a copy of this morning's newspaper and a cup of steaming hot coffee. From what he had seen, he would properly infer or conclude that even though he hadn't seen me, I had already arrived for work and was simply somewhere else in the building.

But despite what courtroom television drama likes to teach, the law makes no distinction between these two types of evidence. It does not consider one superior or inferior to the other. You may consider both direct evidence and circumstantial evidence in reaching your verdict and you may give that evidence whatever value you think it deserves.

A couple of questions that I've learned -- my practice is, and I'll have this opportunity with you, is after trial I meet with jurors and look for ideas on how to improve things during the course of the trial, and I've learned to answer two questions at the outset: Will we have transcripts of witness testimony available for use in our deliberations? Possibly in some cases, but more likely than not, no. Well, if we don't have the transcript, can we keep notes? A good example of circumstantial evidence, we've given you each a notebook and a

pen; means, yes, you can.

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You don't have to if you do not want to. I assume jurors prefer to concentrate on what witnesses are saying.

Most jurors, as well as me, keep notes as a memory aid. What I do promise you is that if you do keep notes, no one will ever look at what you're writing in the notebook unless you choose to share it during deliberations with your fellow jurors. At the end of the trial, you can take the notebook with you, or Tim will see that anything you've written is shredded, but no one looks at it.

Another question I get asked about -- although I think this is fading a bit because most of you are too young to remember the O.J. Simpson trial, but in that trial, which was heavily televised, the judge seemed to spend most of his time at what's called sidebar, secretly conferring with the attorneys in the case, keeping the jury in total darkness about what, in fact, was being discussed.

I think that's a terrible practice; I do not permit sidebars. So you're not going to be distracted by those during the trial. There are two times during the course of the trial that the law requires me to meet with the lawyers at the side of the bench, but I do my best to schedule those when you're on break or we've already taken leave for the day.

I think your most important job is, of course, assessing the credibility of the witnesses. It is up to you to

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decide which witnesses to believe, which witnesses to not believe and how much of any witness' testimony to accept or reject. What I urge you, in making that assessment, don't leave your common sense behind. Remember, you have -- all bring life experience to the courtroom. You also are going to use that life experience as well as what you've learned from the lawyers and from the evidence in ultimately rendering what you think is the correct verdict in the case. This, as you remember, is a patent case. Now, I have taught patent law and I think I'm reasonably good at it, but I'm not as good at it as the Federal Judicial Center, which has actually prepared a special videotape for jurors in patent cases. And, Tim, if you're ready, what I'd like to do is show that tape now before I go into more specifics of this case. (Played video.) THE COURT: The instructor in this case is Judge Vogel. He's a friend of mine. He's from the Northern District of California and was the head of the Federal Judicial

Judge Vogel. He's a friend of mine. He's from the Northern

District of California and was the head of the Federal Judicial

Center until recently, but he has a special interest in patent

law and he does a really good job of making the basic

principles of the law clear in this video.

Everyone has got their screen?

Okay.

1 (Played video.)

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THE COURT: Thanks, Tim.

All right. I hope that was helpful. I think it's a well-done introduction to the basic idea of patent litigation.

I'm not going to try to improve on what Judge Vogel said. Both of the issues he identified, infringement and invalidity, will be for you to consider.

He accurately explained the different standards of proof. The first, infringement by a preponderance of the evidence, more likely than not; and, invalidity, which will also be an issue, by clear and convincing evidence. I'll explain to you how the law defines that as a higher standard, not proof beyond a reasonable doubt, but a significantly higher standard than a preponderance of the evidence.

The patent at issue here you'll hear referred to as the '430 patent. There are two claims at issue, claims 3 and 7. They are what define the actual scope of the invention.

I've already given, as a matter of law, a legal interpretation of the meaning of those claims, and that's going to be provided to you.

As we progress, you'll have a notebook and you're going to get all the material that I think you're going to need to consult during the course of the case to actually follow what it is that is being presented.

As I explained, the '430 patent deals with the field

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of computer servers that are used in large data centers, and the '430 patent features or describes platforms for methods of computer processing in which virtual processing area networks can be configured and deployed in response to software commands.

Now, this sounds like a mouthful, but one of the advantages of patent trials is you're going to hear from some of the best experts in the field. They tend to be teachers, and they're very, very good at untangling what, to me, starts as a difficult concept; but I always find that once I hear a lucid explanation of what it is I'm being asked to decide, I can make sense of the whole thing. Because often, it sounds hard, but as you get into it, you're going to find that it's a fairly straightforward job that you're facing.

What I do want to do is just have a few special words about your jury service.

The first one sounds really difficult, but I'll explain that it's not as difficult as it sounds. I am to instruct you that you are not to discuss the case with each other or anyone else until we begin deliberations at the end of the case. Here, I think the law overstates the facts.

What we're really getting at is that, withhold any opinions of any ultimate issue in the case until after you've heard all of the evidence, you have a chance to hear what the other jurors have to say of how the issues should be resolved.

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It would be absolutely against human nature for you to not, of course, discuss as the trial progresses at least interesting things that happen, idiosyncrasies of the judge, whatever you see that you find amusing or worth remarking about, but just withhold an ultimate opinion until you've heard all of the evidence.

The second thing I ask is that you not do any independent research about the case on your own. In this era of Google, it's always very tempting, but you're going to have all the information you need presented here, and it would be unfair if somebody has access to information that the rest of you don't have, so let's confine ourselves to what we learn here in court over the course of the trial.

Now, as most of you know, and I think I explained this earlier during impanelment, an American jury usually consists of 12 persons. It's not true in a federal civil case. The jury could be from six to 12. I pick the median, which is nine, so I think it's a good number, also allows us to space you out for purposes of social distancing.

Again, as I said during impanelment, there are no alternate jurors in federal civil service, you are all full deliberating jurors, and ultimately your decision will have to be unanimous as to the verdict.

For comfort during the case, if you'd like to bring a bottle of water into the jury box, that's perfectly fine.

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Water is the only thing, though, that the General Services

Administration permits, I think they're jealous of the carpet,

but water is fine by their standards.

Marsha, I think, explained the cell phone procedure. So you can bring your phone in each day and have it available to you during the breaks in the court.

She may have also explained that each morning we put out breakfast for you, light breakfast beginning at 8:00, to save you time, not having to stop, pick up something to eat on the way. Again, if there are any special dietary needs, let us know because we can, within reason, accommodate those.

Today, because we're going to be going a little bit longer than the usual 1:00, we will have lunch for you at 1:00 in the jury room, so you need not wander off for lunch. We'll be breaking at 1:00 so that you can, in fact, have your lunch.

You're going to be able to spend two weeks, essentially, here in this building, and I want you to know a little bit about the court because I think there are things about it that you're going to find interesting as you walk the halls, so to speak.

This court, we are a federal district court, is one of the oldest in the country. We date back to 1789, which was when the court system was created when the Constitution was adopted. We are created by Congress, not the Constitution directly.

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We were probably the third court, I think New York or possibly Pennsylvania was the first court established, but we do go back, again, to the origins of the oldest courts in the federal system.

Obviously this was not the original courthouse. In fact, the original courthouse was a tavern called a Bunch-of-Grapes, which I think, as best I can tell, with historical research, was probably located where State Street and Congress Street intersect today.

For early periods in the court, we only had one judge, it was a very small court, Judge Lowell, who decided that it wasn't very dignified holding court in a tavern, so the court moved to Salem, Massachusetts. Why Salem? Well, for two reasons. One is Salem was then the richest seaport in the world because of the travel trade; and for another reason, Salem was a day closer to Europe and most manufactured goods came from Europe into the U.S., and the day of sailing made a big difference in terms of the cost of moving goods.

The other reason was that Salem, being a harbor, is we collect Customs duties, and for the first decade or so Customs provided about 95 percent of the United States treasury budget.

Nathaniel Hawthorne, you might recall, worked as a Customs inspector. We still see the Customs House today in Salem where he wrote *The Scarlet Letter* when he wasn't busy assessing Customs duties.

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The court left Salem during the War of 1812. I think the fear was being captured by the British at the time, because Salem was somewhat cut off from Boston.

It moved, then, to Boston with the intention of going back to Salem, but we never went back to Salem, for one reason, which is the Erie Canal. The Erie Canal began construction, I think, in 1815; but it was clear to people, with the Erie Canal, Salem didn't have the advantage of proximity to Europe any longer because now you could transship goods from New York all the way to the Great Lakes through the Erie Canal. So the court basically found itself in Boston.

By the time I had joined the court, we were at Post Office Square, which is still a federal courthouse, although now it's the bankruptcy court, principally, that uses the building.

This building was built and opened in 1998. The architect of the building was one of I.M. Pei's partners by the name of Harry Cobb. I.M. Pei & Associates has left its mark all over the world, particularly Boston, the Christian Science Center is an I.M. Pei project. If you've been to the Louvre in Paris, the glass pyramid is I.M. Pei; the John Kennedy Center is I.M. Pei; the Rock and Roll Hall of Fame in Cleveland is one of their buildings.

But Cobb, I think, succeeded in designing this as perhaps the most beautiful and functional modern courthouse in

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the U.S. I say that because I served for a number of years on the committee of the Judicial Conference that oversees all the courthouse renovation and construction in the country, and I've visited a lot of courthouses. Some are very, very nice; some not so nice. This is, by far, I think, the most beautiful of the modern federal buildings.

What Cobb was trying to achieve was a meld of a colonial tradition with the most modern aspects of architecture that he thought were appealing. So the building really divides into -- first, as you came into the courtroom, you have that huge glass wall, it's called a conoid wall, because if you can imagine an ice cream cone cut in half and stuck in the ground, that's what you would have. It's the largest one of its kind ever constructed.

Glass is a very heavy medium and tends to collapse easily, but Cobb solved that problem with that sort of ingenious trussing system that looks very nautical which is what holds the wall in place.

So you have a very modern aspect of the building looking out towards Boston, but as soon as you walk through the doorway, the entrance to the courtroom, you went through a beehive brickwork arch, which was copied from a courthouse in Wiscasset, Maine, which Cobb admired. It turned out that he wanted to incorporate that particular brick entrance into the building. There was only one living mason who remembered how

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to do that work, and he happened to be retired in Maine. He was persuaded to come to Boston and teach a whole suite of apprentice masons of that type of brickwork. So we not only got the benefit of the work, but it also saved a real craft for the future.

Again, the stencilling -- every one of the courtrooms -- the colors change from courtroom to courtroom, but that is copied from a courthouse in Vermont.

The Shaker-style benches, where the audience is seated now, have all the discomfort that the Puritans wanted in a bench, but they are quite handsome, and the design is very similar and very influenced by Shaker in the colonial furniture-making.

Another part of the building that particularly I like is that at the base of the elevator there's a large plaque with roughly a thousand names on it. Those are the names of every person who helped build this courthouse, and I guarantee you, during your two weeks here, you're going to pass by that wall and that plaque; you're going to see someone there with their grandchildren or their children pointing out their real name on the wall, because they were very proud of the building when it was completed.

The last thing I'll mention in my role as a tour guide, is that we have one of the most impressive Ellsworth Kelly installation collections in the country. These are the

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placards, the colored placards that you see in the rotunda and at the end of each of the hallways. Kelly was trained in France, he was the founder of what is called the minimalist school of art, which is inspired by geometrical shapes and vivid colors.

Now, I will confess this: When I first saw the installation, I was thoroughly convinced that it was not art, because I looked at it and I said, you know, I can do this, this can't possibly be art. But over the years I came to realize that if you'd sent me out to find art for this building, I would have come back with some insipid oil paintings of ships that would have kept your interest for about five days and never looked at again. Whereas, I don't know what it is, but somehow you project yourself into those installations and you begin to see things that Cobb -- I'm sorry, that Kelly intended us to see. But I admit, it's a subjective judgment and I'll leave it to you as to whether you think it is art or not.

But the other big collections are, at the moment, in New York. San Francisco Museum of Art, I think has the second one. And people do come who are admirers of Kelly and modern art to see the installations here in this building.

All right. That is what I have by way of just preliminary introduction. You're going to be getting a notebook, I think, very soon from the lawyers, and as the case

progresses, important documents like the patent and the stipulations, which I've already printed out.

And, Tim, perhaps you could distribute those now because they may be helpful during the opening statements. There should be a stack there maybe.

(Discussion off the record.)

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THE COURT: Here we go. It's very short, it's just one page. It says two pages, but the second page is just a certificate of service, but it just has some important numbers and dates on it that I think you might find useful in terms of keeping track of what is about to be said.

All right. We're going to proceed to the opening statements. The opening statement in a civil case is not intended to be the argument -- that comes later in the course of the trial -- rather, it's just simply an introduction by the lawyer of the evidence that he or she thinks, developed over the course of the trial, supports the position of his or her client.

Each side has been allotted 45 minutes for opening. We'll get as far as we can. We may have to interrupt the second opening so that you can have lunch at 1:00 when it arrives, but let's see how they progress in terms of time.

Let's turn now to the opening. The plaintiff will go first, followed by the defendant.

1 MR. THOMASES: Thank you, your Honor. 2 May I proceed? 3 THE COURT: Go ahead. (Opening Statement by Mr. Thomases.) 4 5 MR. THOMASES: Thank you. 6 This is a case about a large Silicon Valley 7 corporation named Cisco that intentionally trampled on the rights of a smaller Massachusetts company named Egenera. 9 Ladies and gentlemen of the jury, my name is Andrew 11:45 10 Thomases, and I represent the plaintiff, Egenera, in this case. 11 With me at the table is Mr. Jim Phillips, who is on 12 the board of directors of Egenera. He will be here with us 13 during the trial. 14 So the heart of the case is this: Egenera was founded 15 to address some major problems in what is called the data center server market. Egenera invented a pioneering technology 16 to solve those problems. Cisco was impressed. Cisco felt that 17 18 it was left out of the data center market, so Cisco came to 19 Egenera under false pretenses. 11:46 20 Cisco told Egenera that it wanted to have a business 21 relationship with Egenera, and it did so to get as much 22 technical information out of Egenera as possible. But Cisco never intended to have a business relationship with Egenera. 23 24 Instead, Cisco took what it learned from Egenera and copied it. 25 Cisco also poached dozens of engineers and employees from

Egenera to help it copy Egenera's product. And then Cisco sold the product that infringed on Egenera's patent.

So imagine, you have developed a pioneering invention yourself and someone comes along and not only steals it, but goes to the marketplace and competes with you based on your own invention. That is exactly what Cisco did here, and that is why we are here in court today.

There's going to be a lot of evidence that you will receive, but, fortunately, the evidence can be grouped into three major buckets, and those buckets will give you context for the issues you'll have to decide.

The first bucket of evidence is about how Egenera invented a patent-worthy invention, and the product that practices that invention is called the BladeFrame. And the patent we'll show on the screen here, just the cover of it, is, as His Honor said, the '430 patent; that's the shortened name of the patent, and that is owned by Egenera.

Now, the second bucket of evidence is evidence showing how, through underhanded behavior, Cisco took information from Egenera about Egenera's BladeFrame product, and then Cisco developed a product based on that information it took.

The third bucket of evidence has to do with Cisco's patent infringement. That is like the trespass on your deed of property that we saw in the patent video.

So let's turn to that first bucket of evidence.

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That's the evidence about how Egenera invented a patent-worthy product.

Well, Egenera's story starts with a man named Vern Brownell. Mr. Brownell is here today, and I'm going to ask him to please stand in the audience there.

Thank you, Mr. Brownell.

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Mr. Brownell is the founder of Egenera, and he's also the inventor of the '430 patent. He founded Egenera in Bolton, Massachusetts in the year 2000. And at that time he already had 20 years of experience with computer servers and in the data center industry.

He had been the chief technology officer at a large bank called Goldman Sachs, and in that role, he was a user, a consumer of products for the data center, including servers. He knew all about them and how they used them. But what he really knew was the problems that existed at that time in the data center server market and with the equipment that he could buy. The equipment was overly complex and difficult to manage.

So let's step back and talk about some terminology.

Servers, what are servers? Well, servers are complex computers, and they're configured specifically to run sophisticated business software, business applications like payroll, e-commerce; if you have an HR department, HR; or even email for your entire company.

Each business software may need a very specific

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configuration for the servers that it's running on, and some of that business software is so complex it needs multiple servers linked together. And servers have the computer brains, they're called processors, chips, CPUs. You may hear CPU, which stands for central processor unit, those are the processors.

"Data center," we've already heard that term. What is a data center? Well, that's the central location in the company where all the computing happens. It's where the servers reside. The server is running that sophisticated business software, that's called the data center.

And I mentioned BladeFrame. That is the product that Egenera made for the '430 patent. It practices the '430 patent.

You may also hear the term "PAN manager," P-A-N manager, and that is the software that runs on the BladeFrame to manage it.

Now, Mr. Brownell saw problems in the old way of building data centers. The old way had multiple overly complex systems. Sometimes they didn't talk to each other very well, and certainly they wasted computer resources. And so there's a lot of computing power that was underutilized; just burning electricity, but not being used to run that software.

One large problem he saw was when you need more and more computing power, and more and more servers, the connections got out of control. So on your screen we've got an

example of in the old legacy data centers, one was called a rack of server. This stack has 20 servers in it, when you connect it together there's a fair bit of wiring.

Something is growing on the screen, sorry.

The next image shows multiple servers together and you start seeing wiring is getting a little difficult to follow and trace, and if you have a lot of servers, you can imagine the wiring goes crazy, if you look at our third image.

Just imagine being the person responsible for that data center and one of the connections go down and you have to figure out which one, it just got a little out of control.

So the data center was getting difficult to manage, took a lot of time to set up and configure these servers, and it also required just a lot of resources to maintain.

So in March of 2000, Mr. Brownell founded Egenera with the sole purpose of solving this problem he saw in the data center. And he wanted to solve it by creating a whole new architecture for servers. He was so convinced of his idea and his vision that he spent almost all his life savings at the time to found Egenera. He also spent his own money to hire a team of engineers to help him bring his vision to life.

One of the first people he hired was Mr. Pete Manca.

Mr. Manca is here in the audience today, and you'll hear from him at trial as well.

You can please stand. Thank you very much.

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So Mr. Manca, he's from Massachusetts here, went to WPI, and he was so inspired by Mr. Brownell's vision that he left his old company to join Egenera, and he also is one of the inventors on the patent. And he also was a major contributor to the BladeFrame system we were talking about.

Now, Mr. Brownell, Mr. Manca, and other teammates worked nonstop. This was their sole project at Egenera. And they brainstormed and went to conference rooms and put ideas on the whiteboard and drafted technical documents and worked nonstop until the fall of 2000 they came up with their concept for this architecture that would bring Vern's vision to life. Of course they didn't stop there, they then were working to make a working prototype, to show that their architecture would work.

So in April of 2001, they got a working prototype, and at that same time, they filed the preliminary patent application. They knew that this was big, so they filed a patent application. Of course they continued to perfect their BladeFrame because they wanted to sell it to customers, and they did so quickly.

By October of 2001, they had their first sale. And then shortly thereafter, they filed a full patent application because they knew that they had something, so they filed the patent application at the beginning of 2002. That patent application was examined for five years by the patent examiners

1 that you heard about in the video. Five years of rigorous review, and then it issued in June of 2001. And this was a big 2 event for the company. They get a certified patent. I have the actual copy 4 5 here with the gold seal from the U.S. patent office. This is a copy of the '430 patent. 7 If we could put up JTX-1, please, which is an electronic version of the patent. I just wanted to make one 8 Turn to the second page, please, Mr. Fitzgerald. 11:55 10 All right. I just want to make one note that might be a question you may have during this case. 11 12 In that video, Judge Vogel mentioned that typically a patent has 20 years from the date of application, but he said 13 14 "typically" because it's not true in all cases. 15 Could you please highlight starting with "Egenera" all the way down to "notice." 16 17 So this tells you that Egenera owns the patent. And right below Egenera's name, it says: "Subject to disclaimer, 18 19 the term of this patent is extended or adjusted by 876 days." So this is one of those exceptions to the 20-year 11:56 20 This patent will go on for more years. Just wanted to 21 22 raise that, if you have a question when you're reviewing the 23 evidence. 24 So what is the BladeFrame, and what did Egenera 25 invent? Imagine if you start from scratch and you wanted a

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whole new architecture for your data system, a system that was very flexible, very configurable and didn't need all those wires. That's what Egenera did.

They started from scratch, and rather than having to deal with a series of very differently configured servers in a data center, they said, let's just get a system that has a cool, all-purpose computing resources that can run any of these applications and can be configured and connected together to run at one point, one application, but then at another point, another application.

So it was a generalized, all purpose; they could do this, and you could configure on the fly with just software.

You could configure your servers on the fly. Much easier to manage, also reduced all those wires, but also reduced the need to go in with physical tools and connect things and connect your servers and configure them.

So it was a totally new computing system.

And we're going to put up a slide that on the left shows a BladeFrame example, a photo of the BladeFrame. That's that tall stack of servers, and they're called blades, and that's Egenera's BladeFrame product. There's 24 servers in there and then some other control products.

In the yellow-dotted box are the components inside there. And we will talk about more of these in a bit. You'll see that there's different components and we're going to talk

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about those components and you're also going to hear from Mr. Brownell and Mr. Manca about this.

Egenera called its total concept, not just the BladeFrame, but they're making a processing area network, or PAN, that's where the name comes from; processing area network.

Now, the patent, the '430 patent, covers the BladeFrame; and, as we see, Mr. Brownell and Mr. Manca are the first two inventors of the '430 patent.

As you saw in the patent video, patents often have figures to help explain the invention. So let's turn to Fig. 1. Fig. 1 is similar to the components I showed you. There's a lot of technical jargon here, but we'll walk through clearly and then you'll also hear more as we go.

So on the left in purple are what are called processing nodes, and they contain the CPUs, which are numbered 106. Those processing nodes are where the business applications are running. They are connected by something called a switch fabric, also known in the patent as an internal communication network. And they connect the processing nodes together and they also connect the control nodes which are in red. And those control nodes are the components that configure the whole system when needed.

That is where that PAN manager software would run or whatever any management software would be running on the control nodes. The control node not only configures the

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internal connections, but also connects the BladeFrame and the system, the invention, to the outside world.

They connect to what's called an external communication network. It could be the internet, IP. It could be a company's network, so people sitting at their desk can check a payroll thing back at the data center, or sometimes it's called the local area network, LAN.

The control node also connects and manages connections to what are called storage area networks, or SAN, which is an external storage network. And that's where the hard drives that store all the data that the business software running the data center has to access, the hardware -- I mean the hard drives and the like.

So one -- we'll hear more about this from Mr. Brownell and Mr. Manca, but before we go on, one note about patent figures. Can we have JTX-1, again, please, column 2 and line 20 to 41, please.

So in the patent it describes what's called a brief description of the drawings. The figures in the patent are only examples of the invention. They don't limit the invention, the invention can be broader than what's shown in the figures. They are just examples, and you can see that from the language that says, Fig. 1 is a system diagram illustrating, example, one embodiment, one example of the invention.

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Similarly, Fig. 2 is described as being illustrating one embodiment, and it goes on. All of the figures are just illustrating examples, embodiments. So they do not limit the invention, the invention can be broader than the figures.

Let's go back to the Egenera story.

So as I mentioned, Egenera's team was brilliant. The went from an idea in 2000 to selling a product in 2001. They immediately won awards, industry recognition and praise for their innovation. This was an innovative product. And you could see just a sampling of their innovation and awards and recognition on the slide, slide 12. Innovator of the Year, Entrepreneur of the Year, New England High Tech All-Star, and the like.

As we will see later in this case, even Cisco praised Egenera.

Egenera's BladeFrame product was also very successful in the market after it was launched. It was one of the most successful startups at the time, and we could see that through their revenue, which within a handful of years went from \$0 to over \$100 million in annual revenue, based on the BladeFrame.

They also won the hearts of customers. We can see on the slide examples of customers in all different industry segments. We have banking, we have higher education, telecommunications, healthcare, the U.S. government, the Census Bureau, service providers, and the like.

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And of course, other companies took notice. One of those companies was Cisco. That's when we get to our second bucket of evidence, which is about Cisco's conduct in this case.

In 2004, Cisco was not in the data center server market. Even though Cisco was a large company at the time, they made routers and switches for the internet. They were not in the data center server market. They didn't even have any product in the development for the data center server market, but they wanted to get into that market. They wanted to get into that market.

They had a senior executive named Mario Mazzola, and his title was chief development officer and his job was to find areas where Cisco could develop into new markets. And he supervised something called the new business ventures group, which was run by a vice president named Ammar Hanafi. And Mr. Hanafi was tasked to go out and find new technologies for Cisco. So he was trying to figure out how to get Cisco into the core of the data center server market.

So let's build a timeline to help keep things straight in context.

So here's our timeline. 2004, Cisco is not in the data center server market.

In early 2004, Mr. Mazzola's team wanted to get as much information out of Egenera as possible to help in this

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goal of getting into the data center server market. wanted to learn about the BladeFrame and the PAN manager software. So Mr. Mazzola had Mr. Hanafi go to Egenera under the guise of entering a business partnership. That was the carrot to lure Egenera into revealing technical information. As we will see, Cisco never had any intent of forming a business partnership with Egenera. The first outreach we'll put on our timeline is January 19, 2004. It was to set up a meeting called a WebEx meeting. That meeting occurred on January 28, 2004. Mr. Hanafi and his staff attended, including engineers, as well as Mr. Manca, and you'll hear from him later about that. meeting was quite interactive, a lot of technical discussion. Then the outreach continued. In February of 2004, Cisco again reached out to Egenera, and Cisco told Egenera its current thinking about Egenera. And the current thinking was summarized here. The first bullet says: "Mario, Luca, and Soni have high regard for Vern" -- that's Mr. Brownell -- "and his work at Goldman Sachs and Egenera." Mario is Mario Mazzola, the name I just mentioned, but also keep in mind Luca and Soni, those names will come back, Luca and Soni.

The next main bullet says: "How do they get into the

out of the core of the data center."

The third bullet says: "Cisco feels as though they're

core of the data center?" 1 2 That's the question they're asking. And late entry is very much on Mario's mind, 3 Mr. Mazzola. 4 5 On the next slide from that same summary: "Six months ago, Ammar" -- that's Mr. Hanafi I mentioned earlier -- "was 7 tasked with determining which technologies can help them get to the center of the data center market." 9 The last bullet says: "Cisco views Egenera's 12:06 10 technology and value-added services as key." 11 Cisco viewed Egenera's technology as key to get to the 12 center of the data center market. 13 The next thing Cisco did, talking about this business 14 relationship, is we want to buy one of your -- acquire one of 15 your BladeFrames. So they acquired a BladeFrame system, and they did that in March of 2004, after the February outreach. 16 We'll put that on our timeline. 17 So here's an interesting fact, though, about this 18 19 BladeFrame. In April of 2004, Cisco crashed the BladeFrame, but they don't tell Egenera that. Hold that thought for a 12:06 20 21 moment, because it will be relevant, but we're going to mark it 22 on our timeline in red, and we mark it in red because it was unknown to Egenera. Cisco crashed it but didn't tell Egenera. 23 24 I did skip one thing on my timeline in March 5th. 25 There was an NDA signed. An NDA is called a non-disclosure

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agreement, which is a special contract which each side promises if there's any confidential information exchanged, they won't use it for any other purpose but to talk about the business relationship. So that was in March. Later in March, they acquire the BladeFrame and they crashed it but without telling Egenera.

The next thing was Cisco comes all the way from California to Marlboro, Massachusetts because they want more information about Egenera. This is a meeting that included Mr. Hanafi and engineers on his team. That is April 15, 2004. And there was a four-hour deep dive tutorial about the Egenera invention, the BladeFrame product, the market they had built for the BladeFrame product, the customers they had, and their future product plans.

You can see on the slide it was a very detailed, 68-slide technical presentation. We'll hear more about that during our trial. But, also, and in the same meeting, Cisco received a full demonstration of the BladeFrame by one of the other inventors at the lunchtime break of that meeting. Again, this all occurred because Cisco said it was interested in a business relationship or partnership with Egenera.

In May of 2004, Cisco invited Mr. Manca to California for additional meetings. Mr. Manca had another detailed technology meeting, this time with Cisco's chief technology officer -- CTO, chief technology officer -- and presented a

slide deck very similar to the one we saw.

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We'll put that on our timeline, May 12, 2004.

After that meeting with the CTO, Mr. Manca also met with Mr. Hanafi again. At the end of that meeting, Mr. Hanafi said very positive things about Egenera, saying, We're still interesting in a business relationship. But also throughout this meeting and other meetings, Cisco repeatedly told Egenera that Cisco was not interested in being in the data center server market. And that's important, because Cisco knew if Egenera thought that Cisco was going to compete, they would not reveal their technology. So Cisco said, No, we're not interested in the data center server market, as part of that carrot to continue to get more information. But Egenera quickly found out that that representation was false.

In late 2004, Cisco gave Egenera the cold shoulder. There's just no more interest, and they stopped contacting Egenera.

Well, why was that? We now know that's because Mr. Mazzola of Cisco decided to build a copycat product for himself. After seeing Egenera's technology in the market, Cisco decided that Egenera's technology could be used for itself.

Now, Cisco may claim that they stopped all communications because of that one BladeFrame that they had that crashed in April of 2004, but that makes no sense.

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Because, remember, Cisco continued to meet with Egenera in April of 2004 and then had more meetings in May of 2004. They continued to praise Egenera's technology. So that makes no sense.

Also, Egenera investigated the logs of that crashed system and figured out it was crashing in a very suspicious manner, in an unusual way that made Egenera believe that Cisco was using it to try to figure out how it worked inside.

Now, back to Mr. Mazzola, the person Mr. Hanafi directly reported to, the person who received all Mr. Hanafi's research. He was one of the people who said he knew about Egenera and Mr. Brownell, and held them in high regard.

Well, he, in 2005, right after the communications stopped, started a stealth company in California called Nuova; and he started it along with Luca Cafiero and Soni Jiandani, the two other names I mentioned, said put a flag in it, because those are two others who also held Mr. Brownell and Egenera in high regard.

Nuova was what is called a spin out/spin in company of Cisco, meaning it started with Cisco's blessing. It also was stealthy, secret; it was a Cisco-backed venture. Cisco invented in Nuova, and there was a free flow of communication of information back-and-forth between Nuova and Cisco, and eventually Cisco became a 100 percent owner of Nuova and is now a Cisco subsidiary.

Nuova started working on a project called code name

Project California. It was a data center server product. It

was a data center server product that looked an awful lot like
the BladeFrame.

Eventually, when Cisco would release this to the public, its retail name would be called UCS, for Unified Computing System. UCS is the name of the product you'll hear a lot in this trial, because that is the product accused of infringement.

Let's quickly look at our timeline again.

In July 2005, Mr. Mazzola and others start Nuova.

August 2006, Cisco has acquired 80 percent of Nuova, with an option to buy the remaining 20 percent. And in this time span, not only did Nuova and Cisco take Egenera's technology, they started taking Egenera's employees, dozens of employees.

By October 2005 and on, Nuova and Cisco hired dozens of Egenera employees.

Now, companies hire from other companies all the time, but in this scenario, the sheer volume of Egenera employees hired by Cisco shows that Cisco was targeting Egenera for those employees specifically.

Here is a list of all the Egenera employees that were hired by Nuova or Cisco, 35 people out of a small, still kind of startup company.

These are the Egenera people who could give Nuova the

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inside scoop on BladeFrame and the PAN manager. They had knowledge of the business, the sales, the customers. They had knowledge of the market. A lot of these people, when they were at Egenera, were in on engineering meetings and knew the technology cold.

One example is Scott Clark. I'll highlight his name there. We'll discuss him in a moment. But another example is Mr. Satinder Sethi. Let's highlight his name.

Mr. Sethi was a sales engineer at Egenera. That meant he was intimately involved with the technology because he had to teach it to customers; how to use it, all its functions and features, how to set it up and the like.

So he was a teacher of the technology, and teach he did. He was hired by Cisco's Nuova entity in 2006, shortly after it was founded. He was tasked with defining the features for the rest of the company of what should be in their new Project California, or UCS. In other words, he was teaching the Nuova team the features UCS should have. He did so based on his knowledge of the BladeFrame that he had from Egenera.

Mr. Sethi was rewarded for his work at Nuova on Project California. When Cisco acquired Nuova, he was promoted and eventually he became vice president in charge of all of UCS. In fact, senior management at Cisco praised Mr. Sethi for being instrumental in the success of UCS. Think about that. An engineer from Egenera was instrumental in the success of

UCS.

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Mr. Scott Clark, at Egenera he was a vice president and he was charged to build out their entire -- what's called their professional services operation. That group, their job was to help customers deploy the BladeFrame and to migrate from the old system to the new system. And also, if they had other problems, he was the group that helped them. So he had very detailed knowledge of the full breadth of BladeFrame and the technology behind it.

He went to Nuova in 2007, and he did the exact same thing. He built out the professional services organization. And he brought with him information he had about PAN manager and BladeFrame. And he knowingly shared that confidential information, the confidential Egenera information, with his colleagues at Cisco and Nuova.

Mr. Clark knew his conduct was wrong. How do you know he knew? Because he sent emails containing unquestionable Egenera confidential information and asked the recipients to delete the email after they review it.

Let's see the example here. You see the top line. He is sending unquestionably confidential information that he somehow got -- even though he left Egenera, he somehow got Egenera confidential information, forwarded to colleagues at Nuova, including Ms. Soni Jiandani, the founder, and says:

"Please delete after review."

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But that's not all. Mr. Clark was readily supplying technical information about BladeFrame and Egenera's PAN manager to his colleagues at Nuova and Cisco. Then he even offers to dig in and dive in and get more information. You can see this in the next slide.

At the top when his colleagues is asking a question about Egenera, Mr. Clark answers them in the bottom email later, and then he says, "I can get more information confidentially and off record."

During this trial, we're going to see more documents and emails from Mr. Clark, including the fact that he was trying to conceal from the rest of the world that he was actually at Nuova. He didn't want his former colleagues at Egenera to know.

So let's sum up some of the evidence in that second bucket, that's the bucket that is about Cisco's conduct. Cisco is out of the data center server market, they felt left behind, so they approached Egenera under the guise of a business partnership that they never intended to consummate.

Instead, Cisco took the technology it acquired, created a secret subsidiary in California, and that subsidiary built a copy data center server product and started competing against the BladeFrame.

Before we move on to our third bucket of evidence, just a couple of more items for our timeline, again for

context.

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April 2008, Cisco completes their full spin in of Nuova. In early of 2009, Cisco announces the release of its USC product, the product accused of infringement here. And the first sales of that UCS product occurred in January of 2009.

So let's go to the third bucket of evidence, that's evidence of Cisco's patent infringement.

Now, you heard in the patent video, but also from His Honor, that claims to a patent are like a deed of property. If you trespass on that deed of property, that's patent infringement. And in this case, claims 3 and 7 of the '430 patent are at issue.

And the language here up on the screen -- it's a little small to read. There's a lot of things in this invention, but some things that repeat in the claims -- you've heard a little bit before and we'll go into more detail in a moment -- are processors or CPUs, internal communication network, control node, external communication network, and external storage network.

So let's go back to Fig. 1 and remember some of that coloring that we did.

They had the purple, that's the processing nodes; that contains those CPUs, those processors that we talked about.

And it has an internal communication, that's in green, internal communication network, also known here as the switch fabric.

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That's all connected to the control node where the PAN manager software or any configuration software would reside, that's connected to, remember, the company's external communication network like a LAN or your company network or the internet.

And also a storage network, also known as an external storage network.

Now, as we went through in our first bucket, the BladeFrame was a totally new innovative architecture. The entire market, even Cisco, praised it as new. And the patent office, after five years of rigorous review, issued the patent on the -- the '430 patent on the BladeFrame.

So what are the odds that Cisco comes up with the same architecture independently? Pretty slim. But let's look at what Cisco came up with.

On this slide is an illustration of Cisco's UCS architecture from their own documents. This is from their own documents. And their own documents show that the UCS has — the x86 computer there, you see that? Those are computer processors, CPUs. So we're going to highlight processor nodes containing CPUs.

They also have an internal communication network, that's the green. There's a fabric extender and communication lines.

They also have a control node where their management software, called UCS Manager, runs and configures the whole

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system. And that control node running UCS Manager also connects to an external communication network, here a LAN.

And it also connects to and controls connections to a storage area network in blue, also called the SAN or external storage network.

Now, although these figures were in separate documents -- let's put them side by side -- and I'm going to rotate this UCS figure just 90 degrees, that's the only change, side by side.

They both have CPUs, processing nodes containing CPUs.

They both have an internal communication network. In fact, in the patent it's called switch fabric; in the Cisco system it's called fabric extender.

They both have control nodes in red, that's where the configuration software, the management software, runs and that's where the UCS Manager runs, on the right. They both connect to an external communication network, the internet or a LAN.

And they both connect to external storage or SAN.

Now, although those figures look nearly identical, there's a lot more detail in the claims, we're not ignoring that, and you will also consider those. So how are you to consider all the detail in the claims? Well, fortunately, as the Judge said, we have the assistance of experts in the field. Professor Mark Jones is here, and he will provide testimony

that will assist you.

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Professor Jones has decades of experience in this exact area, and his expertise is in electrical and computer engineering and he's been a professor since 1997. He was asked to determine whether the Cisco UCS meets all these parts of claims 3 and 7; and to do that he studied the patent, the patent records, publicly available information about UCS, but also sworn testimony from Cisco engineers and internal technical documents about UCS and how it works and how it was built.

He also had his own test UCS that he could analyze to study. So he had access to all of this information, including information that even Egenera didn't have access to. And he spent hundreds of hours reviewing this material. And after reviewing the material, he confirmed that the UCS, the Cisco UCS, practices or falls within claims 3 and 7 of the '430 patent.

Professor Jones will give you all the details during his testimony; and after hearing his thorough explanation, we believe you will find that the Cisco UCS also infringes.

So let's talk about what happened after Cisco started infringing, started selling the UCS. Let's look again at the first six years of revenues of Egenera. Remember, in a handful of years it went from zero to \$100 million, and it was a quite successful startup company, and it had all those customers and

industry praise.

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Now, we all probably remember in 2008 there was a financial crisis and the whole economy had a little bit of a meltdown. Egenera actually faired okay. Their sales went down a little bit, but they still did well, but that was the year of the financial crisis.

Now, recall our timeline. When did the UCS release? 2009, Cisco released the UCS. And with all the resources Cisco had, the sales grew rapidly. In 2012, Cisco's annual revenue for UCS was more than \$500 million. And in 2015, it was more than \$2.5 billion. That's 25 times higher than my highest bar in this graph here. And that's for the infringing UCS.

So let's look at what happened to Egenera's annual revenue after UCS was released. It declined. And that's because Egenera had to compete against its own technology by a company much bigger and had a lot of resources.

Now, Cisco may argue that you should find no correlation between its release of UCS and this decline in revenue. That makes no sense, because you can see that Egenera was a very successful company before 2008. So the decline was because it had to compete against its own technology being used by Cisco.

Cisco may argue that Egenera was a bad product and that's why its decline went down, but that also makes no sense because of course the success it had in revenues but also the

praise it received from the industry and its customers.

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Cisco may also argue that UCS was more successful because it had more bells and whistles, but if you have the fundamental patent on the bicycle and someone comes along and builds a bicycle that has bells and whistles and streamers, it still infringes your fundamental patent on the bicycle.

So after experiencing these harms from Cisco and UCS, Egenera had no choice. In August of 2016, it initiated this lawsuit.

Now, Cisco might have an argument that the '430 patent should be invalidated; that, you the jury, should take it away and cancel the patent and that way they'll get away scot-free. They may even say they invented it first, Cisco invented the patented technology first. But that doesn't make sense. If Cisco invented it first, why would they feel left out of the data center market? Why would they feel left behind? Why would they have so much interest and praise for Egenera and BladeFrame?

So keep these questions in mind if Cisco stands up and tries to say to say that the patent's invalid.

So how does a jury hold Cisco accountable for its patent infringement?

Well, after determining that Cisco has infringed, the next question is the amount of damages. Damages is the compensation that should be awarded to the owner of the patent

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if someone infringes. And the damages in this case will be what's called a reasonable royalty. And a reasonable royalty is the minimum amount of damages that is required for patent infringement, the minimum amount. And it is based on the infringer's use of the patented invention.

You see here, it's reasonable royalty for the use made of the invention by the infringer. And as you will see, Cisco made enormous use, enormous use of the invention by selling the UCS. It sold billions of dollars of infringing UCS product, billions with a B.

Now, we do have an economist in this case who will come here. His name is Dr. Sullivan, he's here today, and you'll hear him testify later in the case. He'll help you analyze the financial information, and he'll explain these materials that he reviewed about the finances of both Egenera and Cisco and the market. And he'll explain how he calculated a reasonable royalty. He calculated it based on the actual sales of UCS infringing servers and the portion of the revenue Cisco obtained that's attributable to the patented invention.

And he'll give you the details, but the result -here's his smiling picture here -- and the result is this basic
equation. You take the number of infringing UCS servers and
you multiply by something called a royalty per server; and
those two numbers multiplied together gives you the total
damages, the reasonable royalty. And what Dr. Sullivan will

explain is that the royalty per server is based on the average 1 2 revenue Cisco got for each infringing UCS. 3 Now, let's look at these numbers that go into this equation. 4 5 Cisco sold 353,496 infringing UCS servers. Each of those servers netted them a revenue of \$14,000. \$14,000. 6 7 Looking at each of the servers, Dr. Sullivan will 8 explain that the portion of that \$14,000 associated with the patented invention is \$1,050 for each server that Cisco sold, 12:31 10 each infringing server. That is only 7.5 percent of the 11 \$14,000 that they made in revenue for each server, and it still 12 gives Cisco a profit for each server, but the royalty per 13 server, \$1,050. 14 So we multiply these two figures together to get our total damages, and the total damages in this case is \$371.1 15 million. That is a big number, but it's only big because 16 Cisco's use of an infringing -- sorry, Cisco's use of a 17 patented technology for their infringing UCS was so big. 18 19 When Cisco's making \$14,000 per server and selling more than 353,000 servers, that is more than \$5 billion in 12:32 20 21 revenue for its infringement. 22 And in context, the \$371 million is only 7.5 percent of that five-plus billion amount. 23 24 So this calculation by Dr. Sullivan is reasonable and 25 a reasonable royalty.

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                   So before I conclude, I want to thank you for your
         attention and time, and on behalf of me, Egenera, and our whole
     2
         team, I want to thank you for your jury service and serving as
     3
     4
         a jury in case.
     5
                   Thank you.
     6
                   THE COURT: Thank you, Mr. Thomases.
     7
                  Mr. Packin, will you be doing --
     8
                  MR. DESMARAIS: It will be me.
     9
                   THE COURT: We do have lunch at 1:00, perhaps you can
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         find a neat place to divide your presentation --
    11
                  MR. DESMARAIS:
                                  Thank you.
    12
                   THE COURT: -- and when you've reached the time, I'd
    13
         like to stop, whether it's a little bit before or not, we'll
    14
         resume after lunch.
    15
                  MR. DESMARAIS: Will do. Appreciate that.
                  May it please the Court.
    16
                   (Opening Statement by Mr. Desmarais.)
    17
    18
                  MR. DESMARAIS: Ladies and gentlemen of the jury,
    19
         Cisco does not infringe the Egenera patent.
12:33 20
                   What you just heard is a story about hiring Egenera
    21
         employees, taking Egenera documents, copying the BladeFrame.
    22
         What he didn't tell you is that Egenera was a failing business
         and laid off almost a third of the company because it was going
    23
    24
                The people that were hired either were jumping off a
    25
         sinking ship or were already fired and looking for work.
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What he didn't tell you is that those people were salespeople and services people, and they had sales documents. Not a single person that was hired, not one, had engineering documents or software or anything of the kind. They have no proof that anyone took any technical details. They have no proof that anyone copied the BladeFrame.

I assume he showed you his best documents in the opening. He showed you two emails from Scott Clark. If you look at those emails, they are an announcement to the worldwide sales team about a new sale to Dell, a new deal with Dell. Or they're from the customer development person asking how do you use the product.

There's nothing in these emails that's technical, there's no information being exchanged. This whole thing is a smokescreen to get you guys to not look at the patent in this case. This is a patent case.

Think about that. The issue for you is do we infringe the patent, not whether Scott Clark sent emails about sales. There's nothing in there technical. This is a patent case. You need to decide are we using the patented technology, not did Scott Clark take some documents he shouldn't have. Yes, he probably shouldn't have done it, but that doesn't mean we infringe the patent.

Keep your eye on the ball, keep your eye on what this case is actually about, which is patent infringement.

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Now, the idea that Cisco or Nuova would need to hire employees and take documents to copy the BladeFrame makes absolutely no sense. This is a patent case. Patents by law are required to teach you how to make the product, right? So the BladeFrame is patented, it's the patent in this case; and the BladeFrame patent, which you're going to have in your jury binders, teaches you how to make a BladeFrame. That patent was published for all the world in 2003. Patents are public, you can go on Google and you can pull of the BladeFrame patent. If you want to know how to make a BladeFrame, you read the patent. And it was public since 2003. The idea that Cisco would need to hire employees and take technical documents to make a BladeFrame in a patent case makes absolutely no sense. It's a smokescreen, and it didn't happen. Your Honor, may I set up an easel? THE COURT: You may, of course. (Pause.) MR. DESMARAIS: So, as all good lawyers, I have a timeline, too. Let me talk to you a little bit about what actually happened in this case. So Egenera's start -- was founded in 2000. They filed

1 their patent in 2003, and they started selling the BladeFrame 2 in 2003 -- excuse me, 2001. In 2003, the patent became public. 3 Now, you've heard him tell you in 2004 we met with Egenera to talk about the business deal, and that happened in 4 2004. 5 Now --7 Can I get a better marker? This one is out. 8 Why did we meet with Egenera in 2004? We met with 9 Egenera in 2004 because Egenera was trying to do a business deal with us. 12:37 10 11 Let's talk about what was happening in these first 12 couple of years. 13 As counsel showed you, in 2001, when they launched the 14 product -- thank you -- in 2001, when they launched the product, their sales took off, that is true, and they rocketed 15 up from 2001 and 2004. 16 17 Egenera was a venture capital backed start. Venture capitalists like to get exits. They invest money in a company. 18 19 When the company is doing well, they want out. So in 2004, 12:38 20 because Egenera had several good years with the product, they 21 wanted to either sell themselves or do an IPO so that the 22 venture-backed folks can get their pay back. 23 So here in 2004, Egenera files paperwork to do an IPO, 24 an initial public offering, to sell the company to the public. 25 The other thing they were doing at the same time, if

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they didn't do an IPO, they were looking to sell themselves.

So there was a meeting in 2004 where Egenera was trying to sell itself to Cisco. Cisco said in response to that, Well, give us one of your products, we'll buy it from you, we'll put it in our internal network in the IT group and we'll test it and we'll see if it works.

And what the evidence is going to show at this trial is that the product crashed. It crashed and rebooted and crashed and rebooted, and counsel said we kept it a secret.

You're going to see the evidence in this case. The evidence is we reached out to the Egenera service folks and said, This BladeFrame you sold us is broken, get it going again. And we had to return parts, and it never really got going again.

So what happened here in 2004 is Cisco bought products from IBM and HP, who were the big competitors to Egenera at the time, and the equipment inside of Cisco is now HP and IBM as a result of this. So Cisco told Egenera, We don't want to buy you, we don't want to buy anymore BladeFrames, the one you sold us didn't really work, and we don't want to buy you because we don't like the product all that well.

Now, the evidence is going to show that Cisco was not the only customer having trouble with the BladeFrame. Like most new startups, you know, there's a lot of promise and it

looks good, there's a lot of hype and the product takes off.

But what happened over time, like most startups -- most startups fail, you know.

What happened over time with Egenera is the customers started seeing there were problems with the product; it wasn't working, it was glitchy, it was crashing, what have you. So Cisco wasn't the only one. You're going to see the evidence of their big customers complaining, Your product doesn't work.

So Cisco wasn't -- the experience at Cisco wasn't alone. Their largest customer was really mad at them because they had a bunch of BladeFrames and they weren't working.

So what happened in this 2004-2005 time frame is you'll see their sales leveled off. They started strong and then the problems with the product -- as the products were out at the customers, the product problems were coming to be seen.

So they canceled the IPO. They filed paperwork for an IPO in 2004, they canceled in 2005, because they were getting too many complaints about the product, competition in the market had leveled their sales off, so their sales started to level off. And Cisco told them we're not buying them.

Then things got really bad for Egenera in 2006. In 2006, Hewlett-Packard launched a competing product to directly compete with the market where Egenera is, which is this data center market.

When Hewlett-Packard came on the scene, coupled with

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the problems the Egenera products were having, what you see in the BladeFrames sales data is they crater from 2006 to 2008 because of a combination of the problems with the product and the competition that was happening with Hewlett-Packard. 2008 became a watershed year for Egenera.

Now, you didn't hear any of this in the story that you were just told. You didn't hear any of this, but let me tell you what happened in 2008. Yes, it was the financial crisis, but that's not what happened to Egenera.

What happened to Egenera is the competition from

Hewlett-Packard and the problem with the product caused them to
say to themselves, Can we make a go of this business? What had
happened up until now, every single year of their existence,
every single year of their existence they lost money. The
venture capitalists who were backing the company are not happy.

So in 2008, when their sales crater because of Hewlett-Packard's competition and the problems in the BladeFrame had revealed themselves, they did an internal study and a review of the product, and they concluded: We have to stop making the BladeFrame. They changed the company in 2008 and said, We have to get out of the BladeFrame business and we're going to turn into a software company.

They're accusing us of stealing their BladeFrame when they, on their own, decided it was a terrible product and they can't keep selling it. The reason they couldn't keep selling

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it was because of its design, and I'm going to tell you more about that in a minute. But let me just make this point first: Cisco didn't launch the UCS until July 2009. Egenera decided in 2008 not to make BladeFrames any longer and to transition away.

The crash of the BladeFrame, the failure of the BladeFrame was not Cisco's fault and it was not the UCS' fault. We weren't even on the market. They were competing against Hewlett-Packard, IBM, Sony, and all the other companies in the data center, not Cisco. Cisco was launched here. That's the first point.

The second point I want to make, he accused us of copying and stealing. How preposterous is that when you think about this. In 2003, their patent was published with all of the details about how to make a BladeFrame, okay. Let's look at what's in that patent.

Here's the system design architecture, the software layout, all the features you need about how to make a BladeFrame in excruciating detail. And when you look at the patent, it has page after page after page of text that describe these figures to tell you how to make a BladeFrame. That was public in 2003. We met with them in 2004 and we bought one, right, we have one at Cisco in 2004, and we have the directions in the patent about how to make it.

We didn't launch a BladeFrame in 2005. We didn't

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launch a BladeFrame in 2006. We didn't launch a BladeFrame copy in 2007. We didn't launch a copy in 2008. We didn't get on the market until July 2009.

If we copied the BladeFrame, we're the worst copier in the world because it took us six, seven years to copy something we had in the company and the patent gave us the directions.

It's nonsense. They have literally no evidence of copying.

There's no engineering documents, there's no software that was taken. This is nonsense, it's a story.

But even more important, use your common sense. When we launch the UCS, the BladeFrame had already crashed. They gave up on it. The one we bought didn't work. Why would we copy the BladeFrame?

In this time period, Hewlett-Packard was the king of the market. Hewlett-Packard had the product that everybody wanted. If we were going to copy somebody, we would have copied Hewlett-Packard's, not the one that died on its own, right? Think about it. What they're telling you, the story they're telling you doesn't make any sense.

So why did the BladeFrame have this problem? Well, let me jump to the design.

This is the structure of the Cisco UCS. The way -I'm going to describe the BladeFrame first, and then I'm going
to tell you what's different about the UCS.

The way the BladeFrame works, this is the chassis,

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these are servers -- I'm sorry, the UCS. This is the chassis, these are servers, this is a switch, and this is a personal computer. You have to set up this network; technically you have to set up the network. In order to do that, you have two choices: You can program these processors or CPUs and that can set up the network, or you can have a network interface card and you can program the network interface card to set up the networks.

Egenera has, in their patent and in their BladeFrame, chosen the architecture to program the CPUs. Why did they do that? Because that allows them, if a CPU crashes, they can — with software commands only — replace these CPUs, and they can replace individual ones. But in order to have that functionality, you have to make complicated changes to the software operating system code that is on the CPUs. And they couldn't figure out how to do that profitably. They had scores of software engineers to try to figure out how to change the code on the operating systems, but every time Microsoft issued a new Windows operating system, the BladeFrames would crash because the code that they were putting — the complicated modifications they were putting on the CPUs didn't work.

So the fundamental design that the BladeFrame chose, which is programming the processors to set up the network, was a failed design. That was the design flaw that killed the BladeFrame.

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And when you see the documents about what the customers were complaining about, it was that these software modifications that are generally made to the processors were crashing the system.

Hewlett-Packard and then Cisco, Nuova, decided to go in a totally different direction.

Cisco designed, or Nuova and then Cisco now, designed it's own proprietary interface card, brand-new design at Nuova, and the switch sets up the network by programming the network interface card, not the individual CPUs, not the operating system software. So if there's a problem in one of the CPUs in Cisco's products, we have to swap out the whole server. We can't swap out individual CPUs. We do not work the way that they have it invented.

Now, that may sound like a detriment, but it's not a detriment because by programming the network interface cards, we don't have to mess with the complicated modifications on the operating system that Egenera couldn't contend with.

So in our product, we swap out servers, not CPUs; and we don't program, we don't change the software code in the OS and make those complicated changes; we only deal with the network interface cards.

And the market has spoken that this difference in design is important and important to success. We do it the way Hewlett-Packard does, and Cisco/Hewlett-Packard were

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tremendously successful in the market. Egenera does it by the individual CPUs and there are other companies like them, Zygo, who chose that approach, and they didn't do well in the market.

So there's a reason why Egenera didn't succeed with their BladeFrame, and it was because of their design, it's because of what's in their patent, and we chose not to do it that way.

Now, I think I have time to show you that. Here's the Egenera patent, this is claim 3 and also claim 7 in this case.

I'm just going to right to that thing there so that we can get there, because I'm looking at the clock.

Let's look at what's in the language of the claim.

The way a patent claim works is you can see here this is long and detailed. It's long and detailed because Egenera was not first to the data center market. They didn't invent data center products. They didn't invent the data center, IBM and HP were already doing this.

The data center is where a company stores all its records. People have been doing this for years before Egenera, and IBM and HP were the two big companies by the time Egenera came on the scene.

When Egenera came on the scene, they actually had trouble getting this patent out of the patent office because the patent office said that people were already here in the data center, you didn't invent this. So Egenera actually went

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down to the patent office and sat down with the patent examiner and said, No, no, we have a particular way of programming these processors and setting up this network, and they had a back-and-forth with the patent examiner, they convinced the patent examiner that their particular way might be patentable, and after that meeting with the examiner, they changed these claims to add that specific requirement. And you're going to learn about that at the trial; we're going to show you the patent office record. And let me show it to you here. So this claim requires that you are going to establish the specified virtual local area network topology. Okay. you're going to set up a network. You're going to establish a network. So let me write that here. (Pause.) MR. DESMARAIS: So in order to infringe this claim, you have got to establish a network. It's a particular kind, it's a VLAN or virtual local area network, but let's just make it easier by saying you have got to establish a network. Can't infringe a claim if you don't establish a network. The claim tells you how you have to establish the network. You program the corresponding set of computer

processors. Just what I told you they do, it's in their

1 patent, it's in their claim. So we know that to establish the network, you have to 2 3 program the computer processors. So let me write that down. 4 5 (Pause.) 6 MR. DESMARAIS: So in order to infringe this claim, 7 you got to set up the network and you got to program the computer processors. 9 Now, the Judge has construed the terms in this patent, 12:54 10 and let me just jump to that. 11 There we go. 12 The Judge is going to give you his order about the construction of the terms in the patent, and you can see on 13 14 your screens there, the Judge said whenever we see the term 15 "computer processors," that means CPUs. CPUs. There we go, CPUs. 16 So what do we know about this patent claim? 17 18 patent claim requires you to establish the network by 19 programming the CPUs. Right? 12:55 20 And I showed you the way the Cisco UCS works, we don't 21 That system, that design doesn't work. program the CPUs. 22 you program CPUs, you have to make complicated modifications to 23 the operating system. 24 The operating system is like Windows. Microsoft 25 doesn't make it easy for you to make changes to their operating

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system. These guys couldn't figure it out. They had dozens of software engineers trying to do it, and they couldn't figure it out. You're going to see the documents, the documents are hilarious. The customers are like, Why can't you get this thing to work? And Egenera is saying, We don't know how to get it to work, it's going to take three weeks, it's going to take six months.

This is products installed at their largest customers they could not keep going because every time Microsoft updated Windows, the modifications they made to the previous versions didn't work anymore.

We don't do that. We designed our own special network interface cards, and we set up this network by programming these interface network cards, and they're totally different parts of this system.

This is a photograph of one of our servers.

You'll see this in the case, we're going to bring a server in.

These are the CPUs, there's memory, and over here is the network interface card that we designed. It's our own, it's proprietary, it's on a separate card. The CPUs are the brains. It's just like a personal computer. The CPUs are the brains, it's where the operating system is that runs the server.

The network interface card is something totally

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different. There's no operating system here. This is the interface between the server and the external network. You'll plug your Ethernet card into there; or if it's a blade style, you plug it into a socket. The network card is something totally different from the CPU. It was a different design entirely, and it's the one Hewlett-Packard used; this is their idea, although we designed our own proprietary NIC, Hewlett-Packard is not accusing of us infringement because we designed our NIC. NIC is network interface card.

And this design, when you do it with the network interface card, is what resulted in us being successful and Hewlett-Packard being successful. And by programming the CPUs instead, and trying to change the Microsoft operating system, these guys made a product that didn't work, and their invention didn't work. That's why the BladeFrame failed.

Cisco does not infringe. A NIC is not a CPU. And this isn't a word game. It's not a word game. The difference between programming the CPU and programming the NIC made the difference in the success of these two companies. Nuova was tremendously successful and Egenera wasn't because of this fundamental difference in the design of the two products.

Now, that leads me to what I like to call the bedrock facts of this case, and I'm going to make a commitment to you right now. I'm going to prove three things to you, three bedrock facts.

Bedrock fact number one: The Cisco UCS did not cause the BladeFrame to fail. The BladeFrame failed in the market on its own because its design didn't work. That's bedrock fact number one, and I'm going to prove that to you at this trial.

Bedrock fact number two: This patent claim requires that you set up a network by programming the CPUs, and that element was added to the claim in a meeting at the patent office, and they wouldn't have a patent if that wasn't in the claim. That's bedrock fact number two, and I'm going to prove that to you at this trial.

Bedrock fact number three: The Cisco UCS does not set up the network by programming the processors. We program the NICs, we designed the NIC ourself. The NIC is not a CPU. We do not infringe this claim. That's bedrock fact number three, and I'm going to prove that to you at this trial.

Then at the end of this case, I'm going to remind you of those bedrock facts. The BladeFrame failed on its own, it was not Cisco's fault. This patent claim requires you to program the CPUs, and the Cisco UCS programs the NICs not the CPUs.

I'm going to remind you about those three bedrock facts, and in closing argument I'm going to tell you how I prove them, and at that time I'm going to ask you folks for the only fair and just verdict in this case.

There is no infringement. Cisco does not infringe

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         this patent, and Egenera's story makes absolutely no sense.
     2
                  Thank you.
     3
                  THE COURT: Thank you. I assume you don't need
         additional time?
     4
     5
                  MR. DESMARAIS: I tried to abbreviate it, your Honor,
     6
         so, yes.
     7
                  THE COURT: Very good job.
     8
                  All right, jurors. Let's break for lunch. Marsha
     9
         will check with you in about 40 minutes, 45 minutes, find out
01:00 10
         when you're comfortable. In terms of your planning, I'll have
    11
         you out of here by 4:00 before we get into the rush hour so
    12
         there won't be a concern about that.
    13
                  Enjoy lunch, and then we'll resume when the jury is
    14
         ready. We'll assume at least 45 minutes.
    15
                  THE CLERK: All rise.
                  (Recess taken.)
    16
                   (The jury entered the courtroom.)
    17
    18
                  THE CLERK: Resuming on the record, Civil Action
    19
         1:16-cv-11613 Egenera, Inc. versus Cisco Systems, Inc. Thank
01:55 20
         you. You may be seated.
    21
                  THE COURT: I think we're ready for our first witness.
    22
                  MR. BATCHELDER: Good afternoon, your Honor. Jim
    23
         Batchelder, Ropes & Gray. We do have those jury binders ready
    24
         to hand up if now would be a good time for that.
    25
                  THE COURT: If you would, please.
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                  MR. BATCHELDER: Thank you, your Honor. May our
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         paralegal approach?
     3
                  THE COURT: Yes.
                  MR. BATCHELDER: Thank you.
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     5
         Your Honor, as its first witness, Egenera calls its founder,
         Mr. Vern Brownell.
     6
     7
                  MR. PACKIN: Your Honor, before we start, we'd like to
     8
         invoke the rule excluding other fact witnesses from the
         courtroom, please.
01:56 10
                  THE COURT: Do you have any? Almost everybody's an
    11
         expert as far as I can tell.
                  MR. PACKIN: Yes, there are other fact witnesses.
    12
    13
                  THE COURT: All right. Well, you're entitled to do
    14
         that, if you wish. But anyone testifying as an expert is
    15
         permitted to stay.
                  MR. PACKIN: Of course, your Honor.
    16
                  MR. BATCHELDER: May I proceed, your Honor?
    17
    18
    19
                  VERN J. BROWNELL, sworn
    20
                                DIRECT EXAMINATION
    21
         BY MR. BATCHELDER:
    22
             Sir, would you please state your full name, for the
    23
         record?
    24
         A. I'm Vern Joseph Brownell.
    25
         Q.
             And what is your relationship to Egenera?
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- 1 A. I was the founder of Egenera and I had various roles
- 2 there, including CEO for a number of years, and Chief
- 3 Technology Officer.
- 4 Q. Where are you from originally?
- 5 A. I'm from Clinton, Mass., which is an old mill town about
- 6 an hour from here, hour west.
- 7 Q. Did you go to college, sir?
- 8 A. I went to engineering school, engineering school called
- 9 Stevens Tech, graduated in 1980.
- 01:57 10 0. And after that?
 - 11 A. I did a master -- MBA degree in 1986.
 - 12 Q. Can you keep your voice up a little bit? Maybe move the
 - 13 microphone closer.
 - 14 A. Yes.
 - 15 Q. Thank you.
 - 16 What kind of work then were you doing in the 1980s outside of
 - 17 school?
 - 18 A. I, after college, I went to work for various computer
 - 19 manufacturers here in Massachusetts, some of the big names.
- 01:58 20 Q. And you moved from there to?
 - 21 A. I went from -- my last role was at Stratus Computer in
 - 22 | Marlborough, Mass., I then got a job at Goldman Sachs, the
 - 23 investment bank.
 - Q. How did you make that jump to Goldman from a software
 - 25 company?

- 1 A. It's a little bit of a story, but as I was an engineer for
- 2 those first ten years of my career, I came to the belief that
- 3 it's important for an engineer to understand how a customer
- 4 uses products. And I felt that as an engineer in a vacuum,
- 5 maybe with other engineers, I wasn't getting that experience.
- 6 So I thought maybe being a customer would be a good way to do
- 7 that.
- 8 So around the same time I wound up getting a call from someone
- 9 about a potential role on Wall Street. I then wound up, long
- 01:58 10 story short, getting a job at Goldman Sachs where I became a
 - 11 customer.
 - 12 Q. And how long were you there at Goldman?
 - 13 A. I was supposed to be there for only a few years. I
 - 14 thought it would be just a few years but it turned out to be
 - 15 ten years and about a good run.
 - 16 Q. What was your position there ultimately?
 - 17 A. My title was called Managing Director, but I was also
 - 18 known as the Chief Technology Officer for the firm.
 - 19 Q. How many people did you manage?
- 01:59 20 \mid A. I had between 1,000 and 1,500 people that were in my
 - 21 group.
 - 22 Q. What was your main job there?
 - 23 A. Well, as Chief Technology Officer, I was first hired to
 - 24 help transform Goldman from a bit of an antiquated technology
 - 25 environment, kind of main frames and PCs, to something more

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    cutting edge. So I had experience from my roles as an engineer
    in what's called IP or IP networking and it turned out I just
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- happened to have the right exact skill set for helping them
- make this sort of transition into the age of the Internet and
- 5 IP and so on. So I very quickly got promoted there to this
- role as Chief Technology Officer.

- 7 While you were at Goldman Sachs were you working with data centers?
- Yes, very much so. So, you know, we built many data 02:00 10 centers around the world.
 - 11 Let's back up and just define that term. What do you mean 12 by a data center?
 - So data center could be a room, a large room like the size 13 Α. 14 of this courtroom, or it could be an entire building
 - effectively filled with computers and the peripheral devices 15
 - that interconnect those computers, connect them to the network 16
 - and things like that. So you'll see these pictures of racks 17
 - and racks and racks of, effectively, computers. 18
- 19 Ο. And what do all those computers and related pieces of 02:00 20 equipment do in a data center?
 - 21 You can kind of think of them as the brains of the 22 corporation. They do everything from run your email, host your 23 website, all your customer records, you know, ERP. All of the 24 applications that are necessary to run a business typically
 - 25 reside in those kinds of data centers.

- Q. So at Goldman in your work with data centers were you noticing problems or inefficiencies?
- 3 A. I was. The challenge that we had is as we scaled out the
- 4 data centers, they became incredibly more and more complicated.
- 5 And I felt a little bit quilty in some ways that I was, you
- 6 know, the person who was hired to transform this environment
- 7 yet things were getting more and more complex.
- 8 Q. You eventually left Goldman to found Egenera; is that
- 9 right?
- 02:01 10 A. I did. I left Goldman in -- a little bit after the year
 - 11 | 2000 to found Egenera based on ideas that I had sort of dreamed
 - 12 up as part of the role or thinking about a better way to build
 - 13 a data center.
 - 14 Q. That's why you founded Egenera?
 - 15 A. That was, yes.
 - 16 Q. What were your first steps then in founding Egenera?
 - 17 A. Well, I had to -- all the normal things one has to do just
 - 18 to, well, leave a company and then go off and start another
 - 19 company. So I had to obviously hire is the most important
- 02:02 20 | thing, hiring the people to build this vision that I had.
 - 21 Finding a place, an office. You know, of course finding money
 - 22 and investors in the company, and so on. So --
 - 23 O. Where was that first office?
 - 24 A. First office was in Bolton, Mass., in a basement dentist's
 - 25 office.

- 1 Q. And in those early days how was Egenera funded?
- 2 A. Well, for the first -- until September of 2000 it was
- 3 basically funded by myself. I used effectively all my savings
- 4 to pay for the people and the space and the equipment they were
- 5 using.
- 6 Q. So did you come up with an idea for simplifying data
- 7 centers, making them more efficient?
- 8 A. I did.
- 9 Q. Well, let's talk about that. Let's put up, please,
- 02:03 10 JTX 216.
 - 11 What is this document, sir?
 - 12 A. So this is a presentation that we used in the very
 - 13 beginning of the company to describe the company.
 - 14 Q. How soon after the company began was this document
 - 15 created?
 - 16 A. Egenera was incorporated, I believe, in May of 2000 -- or
 - 17 | March of 2000. So this would have been just a few months after
 - 18 that.
 - 19 Q. Very early days?
- 02:03 20 A. Very early days.
 - 21 Q. Okay. Let's turn, please, to page 6347. What are we
 - 22 looking at here, sir?
 - 23 A. So it's hard to read the title on here. It says, "How do
 - 24 you add more computing horsepower?" So it's a description of
 - 25 how you would add to a data center in today's world, and

"today" referred back to 2000. And then that's on the right side. And then -- sorry, on the left side. And then on the right side it describes how you would do that with this new architecture that I had in mind and the differences between the two.

- Q. All right. On the left side can you just summarize on a high level some of the problems that are being described there?
- A. You can imagine if you're working in a data center and you want to add a computer resource because you have to scale up
- o2:04 10 something and your business is changing, you order a server,
 - 11 you hope you have a place in your server racks to put that in
 - 12 there, you find space, you schedule someone to cable. You have
 - to coordinate all the resources and all the different groups
 - 14 that are involved in storage and networking and so on. And
 - then, you know, if you have to change anything you've got to go
 - do that all over again. And it's a very manual, time-consuming
 - 17 physical process.
 - 18 Q. If it's okay with you, I'd like to put back up the
 - demonstrative that Mr. Thomases presented in opening about the
- 02:04 20 cabling and just hear from your perspective what that's about.
 - 21 A. Sure.

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- 22 Q. So what are we looking at here?
- 23 A. So here, this is one rack in a data center. So this would
- 24 be very typical of what you would see in a large data center
- 25 except this is one of them. There's about probably twenty

- servers, computer servers in there. And there's cabling that
 goes up and down the left and right-hand side. Kind of messy.
- Q. All right. Let's look at the next one.
- 4 A. So this is what happens in a larger data center with more
- 5 cabling. You can imagine it becomes more and more complex to
- 6 make changes to administer this. Very time-consuming and
- 7 manual.
- Q. And then the next picture, please, what are we looking at
- 9 here?
- 02:05 10 A. This is kind of like the worst case where you can't even
 - 11 see the physical devices it's so covered with cables. You
 - 12 know, imagine trying to debug this or find a problem in one of
 - 13 the connections. It's just impossible. And then trying to
 - 14 change this, you know, it's just very, very hard.
 - 15 Q. So you thought there was a better way?
 - 16 A. I thought there was a better way.
 - 17 Q. Can you just summarize at the highest level to the jury
 - 18 | what your fundamental idea was?
 - 19 A. So in a sense, you know, when you're -- when you have a
- 02:06 20 | lot of computers and you're using them to run your business,
 - 21 the cables and a lot of the other artifacts, as I'll explain,
 - 22 | you don't really want the cables. They're almost like a
 - 23 | necessary evil. They're part of how you have to or how you had
 - 24 to build data centers back in those days. So cabling is one
 - 25 example.

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         The fundamental premise that we were coming across was
     2
         simplifying the data center as much as possible. We use
     3
         primarily a technique called virtualization of those data
         center components to achieve that simplification. Cabling is
     4
     5
         just one example.
              Let's pause there. What do you mean by "virtualization"?
     7
              So virtualization is basically removing or changing a
         physical device into a virtual device which is really part of
         software. So it's almost like an avatar or a representation of
02:06 10
         a physical device. And by doing that you just -- you enable a
    11
         whole level of sophistication and capability that you wouldn't
    12
         have with dealing with physical devices.
              Did you invent virtualization?
    13
         Q.
    14
              Oh, no. Virtualization has been around since probably the
         '60s, maybe even earlier.
    15
             And what was the invention?
    16
              So the invention here was we applied the virtualization to
    17
         all the data center components. There are other vendors at the
    18
    19
         time that were doing virtualization of CPUs and memory. There
02:07 20
         was no one really effectively virtualizing those components,
    21
         like reducing cabling, reducing the number of switches and
    22
         other devices that we'll talk a little bit more about, I think.
              Were you using the term "architecture" back in those days?
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Yes. You know, this is -- I refer to it as an overall

architecture that uses techniques like virtualization. A new

24

- 1 architecture.
- 2 Q. Let's take a look at, please, JTX 263 page 019.
- 3 First of all, what does the title say here?
- 4 A. It says, "Twenty Years of Additions Increased Complexity
- 5 and Locked CPU/Memory to Specific Configurations."
- 6 Q. And this was a slide that you used in your days at
- 7 Egenera?
- 8 A. Yeah. We frequently used this slide to describe to
- 9 customers and partners the attributes of our overall
- 02:08 10 architecture and how we were using virtualization and other
 - 11 techniques.
 - 12 Q. Okay. If we could just put a little box around that
 - 13 middle blue puzzle piece, what are we looking at there?
 - 14 A. Those are the CPUs and memories that you would typically
 - 15 | find in a computer. And those CPUs, central processing units
 - and memory are computers. They're just like the computers that
 - you have on your desktop, your laptops, but they're put in
 - 18 racks and they're used to provide business function.
 - 19 The puzzle pieces around that are the components that are
- 02:09 20 | necessary to use those computers in a data center environment.
 - 21 And what a lot of people, I think, were ignoring at the time is
 - 22 all of those components dramatically increased the complexity
 - 23 that a systems administrator or someone who has to deal with
 - 24 this, and every one of those puzzle pieces is a different
 - 25 component. So it's not just about the CPUs and memory, it's

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1 about all the puzzle pieces that have to be managed.
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- 2 Q. Might help to consider one example. Just to the lower
- 3 | right there, there's a yellow piece called an HBA. What is
- 4 that?
- 5 A. Right. So this is one component, pretty obscure. It's
- 6 called a host bus adapter, that's what it stands for. But most
- 7 data center computer servers would have two of those in every
- 8 computer server, physical devices that had to be managed,
- 9 upgraded, taken out if there was a fault, and things like that.
- 02:09 10 It just reflects the complexity that that extra component,
 - 11 which is really an artifact of how you had to create data
 - 12 centers. But that's just one example.
 - 13 Q. So what's the big deal? Why was it a problem to add more
 - 14 and more puzzle pieces?
 - 15 A. Well, you can imagine all of these have to be upgraded and
 - 16 maintained, and fault points, and all those sorts of things.
 - 17 And if you scaled that across numbers of servers, we're really
 - 18 | just kind of showing one server here, once you have, as we did
 - 19 at Goldman and many other customers, tens of thousands of these
- 02:10 20 | servers, each of these having these puzzle piece
 - 21 configurations, it just becomes overwhelming and a huge cost
 - 22 | burden and frankly people burden for managing data centers.
 - 23 | Q. Let's turn to slide 022. If you would first read the
 - 24 title?
 - 25 A. It says, "The End Result is Complexity that Rigidly Locks

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1 Applications and Configurations to the CPU/Memory."
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- Q. Before you address that, let's also, if you wouldn't mind
- 3 reading the subtitle?
- 4 A. Subtitle says, "Computing resource" -- should be "S,"
- 5 resources, I suppose -- "trapped on islands of capacity."
- 6 Q. All right. So would you explain to the jury, again at a
- 7 | high level, what you meant by those two phrases?
- 8 A. So the boxes that you see there are all indicative of
- 9 applications, business applications that you would be running
- o2:11 10 in a data center. So let's take an example. The email servers
 - 11 that are in a business. And what happens is those servers are
 - 12 configured in a particular way with a particular set of puzzle
 - 13 pieces that are configured a particular way. What winds up
 - 14 happening is those computer resources can't be used for, say,
 - another application like CRM, which is customer resource
 - 16 management, or the web services in the company. Those
 - 17 computing resources are locked into a particular application
 - 18 and there's no ability to move them back and forth. And you
 - 19 wind up with underutilized CPUs.
- 02:11 20 Q. So if -- taking the upper left-hand box, each of these
 - 21 boxes is one of these islands of capacity?
 - 22 A. That's right.
 - 23 | Q. So let's say the email application didn't use all the
 - 24 computing power on that server. What happened to that unused
 - 25 computer power?

- A. It just sits there unused and is not available for any other application.
- 3 Q. And that was something you thought could be improved?
- 4 A. Yeah. Yeah, when I started to look at what was going on
- 5 in the data centers at a very detailed level, this quickly
- 6 became a big problem.
- 7 Q. In each of these boxes you have something on the left
- 8 called an S-A-N. What is that?
- 9 A. So SAN is a term "storage area network." It refers to the
- 02:12 10 network that connects you to your storage, your disks, you
 - 11 know, where all your records -- and so on. In the email
 - 12 example, that's where the email would actually be kept, out on
 - 13 we call it the SAN.
 - 14 Q. Each box also has a cloud shape called the network. What
 - 15 is that?
 - 16 A. Yeah. That would be your -- either the corporate network
 - or the access to the inter networks. Sometimes it's called IP
 - 18 networking. That's your network that you communicate
 - 19 throughout your organization and outside the organization.
- 02:13 20 | Q. Okay. So how did you propose moving away from these
 - 21 boxes, these islands of capacity?
 - 22 A. The fundamental concept was to use virtualization and
 - 23 other techniques to remove or replace as many of those puzzle
 - 24 pieces as possible. An exercise of simplification.
 - 25 Q. And what would the benefit of that be?

02:14 20

02:14 10

- A. Well, the benefit of that is if you started to do that then you could have these, we call them blades or sets of CPUs and memory, the little gray box in the middle, that could easily be switched between applications. So you would no longer trap those particular CPUs to email. You could very fluidly use them for your web services application or your trading system or whatever it may be.
- Q. And how would that change affect cost for construction?
 - A. It could be a dramatic cost driver. One example here is there's a thing called DR, disaster recovery, where most enterprises have exactly the same copy of a data center in a different location. So they have all these CPUs and memory and all the puzzle pieces just wasted -- not wasted but they're there just in case the primary site has a disaster, God forbid an airplane going into your building. Those resources are completely unused when there's not a disaster happening, which hopefully is all the time.
 - So that's just the most, you know, the worst case example of, you know, not using those resources.
- Q. And how did the change you're talking about affect the power consumption of the system?
 - A. Yeah. I mean, the fewer servers that you can have and the fewer puzzle pieces, all of those use energy. And in another role that I had, I found out that data centers are the number 2 consumer of electricity in the entire world. It's kind of a

- dirty secret, but energy from data centers is a huge consumer of electricity and it needs to be reduced.
 - Q. Let's look at slide 026, please. What does this show?
- 4 A. So this is a diagram that sort of takes the next step in
- 5 talking about how -- the title is "Fabric Computing," how the
- 6 fabric computing concept here enables a more utility of
- 7 computing, where you're really creating these freed-up puzzle
- 8 pieces on the bottom here that show that you can use those very
- 9 fluidly and be able to move applications, you know, back and
- 02:15 10 forth very fluidly.

- 11 It also made it very easy to administer because all of the
- 12 puzzle pieces were now -- you know, this is a bit of a cartoon
- 13 graph, but they're now in that box in the middle and they could
- 14 be managed remotely by customers instead of actually physically
- 15 working with us.
- 16 Q. So if a customer had an email application and then a dozen
- 17 other applications sitting on top of this, to what extent could
- 18 those be tapping into those puzzle pieces on the bottom?
- 19 A. Yeah. Each and any of those pieces on the bottom, which I
- 02:16 20 | would call blades at this point, those blades can access any of
 - 21 the LAN and SAN resources. They could run any of the
 - 22 applications very fluidly with the appropriate security
 - 23 measures put into place and things like that.
 - 24 Q. And coming back to the virtualization term used before,
 - 25 does this slide illustrate any of that?

- 1 A. Well, the way that we were able to remove many of those
- 2 puzzle pieces, not all of them, but many of them, was through
- 3 virtualization. Virtualization of the HBA, for instance, the
- 4 one that you called out earlier. There are no host bus
- 5 adapters on those blades on the bottom. They're stateless.
- 6 They have no NIC or HBA that needs to be managed.
- 7 Q. The way that you're using virtualization, had that been
- 8 done before?
- 9 A. No, not in, again, in the data center, in the peripherals
- or, you know, captured by the puzzle pieces here. No, nobody
 - 11 had done that kind of virtualization.
 - 12 Q. Could we turn to 028, please?
 - 13 | So now we're moving from puzzle pieces to actual depictions of
 - 14 | computer components?
 - 15 A. Yes. This is a little bit more getting to what the actual
 - 16 BladeFrame, our product, looked like.
 - 17 Q. What are we seeing at the bottom there?
 - 18 A. At the bottom are basically those blades, those CPUs and
 - 19 memory, where what -- we call them stateless blades.
- 02:18 20 | Q. And then looking at the big box above, would you explain
 - 21 what those components are?
 - 22 A. Yeah. At the bottom there's a fabric switch which
 - 23 interconnects all the blades together. The bigger box on the
 - 24 top is what we call the control blade, which ran the software,
 - 25 which we call PAN Manager -- and I think we'll talk more about

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that -- ran the software that manages the environment, manages
the virtualization, manages the provisioning and creation of
servers and things like that.
     So coming back to the example of an email application
sitting on top of this architecture, how would the email
application make use of this?
     So you would, you know, you could have -- say you only
need one blade to run email but you had a capacity constraint,
you could have spare blades in the system. You could expand
your email server from one blade to two blades without ever
having to put, you know, make changes, do any kind of cabling
or anything like that. That's one example. Or if you had
extra resources, say, in your disaster recovery site that you
didn't -- that was not running any applications, you could use
the CPUs over there to do email.
    Let's come back to JTX 216 and look at page 6395, some
bullet points there. Let's just go through them, the major
bullets. So the first one says, "Highly scalable." First of
all, was that an attribute of the architecture you were
describing?
     Yeah. Scalability refers to the ability to grow and
shrink, kind of, as the processing capacity demand. And you
see a lot of this in businesses where, you know, around
Christmastime or Black Friday a business has to add resources
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to their website to keep up with all the demand that they're

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going to have on Black Friday. So in this example you could
scale that up very quickly by adding those blades without ever
having to go in the data center, taking them from another
application or spare blades that you would have.
    All right. The second major bullet says, "Easy
centralized administration." Was that also a feature you were
touting?
    Yeah. This was really important to me because I had, in
Α.
the years that I was at Goldman, we had people working around
the clock in data centers with screwdrivers changing things
around, configuring stuff. Really hard physical work.
administrators could now do this from their offices or from
their home being able to make those changes that were
previously physical changes.
    All right. Then the third one it says, "Highly
available." Was that a feature of your architecture?
     Yeah. So one of the things that -- and this comes, again,
from, I quess, my being a customer. I wanted to make sure
these systems stayed up, didn't crash. It sounds kind of
silly, but we all know computers crash. You have to build in
kinds of engineering that are redundant and do different kind
of techniques to make sure that the systems can run all the
time. We had customers, of course, that had demanding
applications that you could not lose any downtime at all on.
And we all know computers crash all the time. So we had
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techniques like -- it's called no single point of failure, but
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         everything is redundant, different devices, two power cords
         going to different plugs in the wall, all that sort of stuff
     3
         was engineered in the product from the very beginning.
     5
         Q.
              All right. And then the final major bullet says,
         "Designed for Data Center." What were you referring to there?
              Well, we were trying to make it so that it fit into the
     7
         data center. Like, you saw some of those data center products
         with the cabling earlier, had to be the same size, so it had to
02:22 10
         fit in there. It was built so that the blades, the full blades
    11
         themselves were easily -- you could pull them out very easily,
    12
         you could replace them, replace one if it failed without
    13
         crashing the whole system. So it was designed and won awards
    14
         for its design capability in the data center.
    15
              Let's turn to slide 6362, please.
         The very top bullet says, "Patentable architecture." Do you
    16
         see that?
    17
    18
             Yes, sir.
         Α.
    19
         Ο.
             What does that refer to?
02:22 20
              Well, again, this is that very early three months into the
    21
         company view. We were convinced that this was very unique in
    22
         the marketplace and this architecture and the application of
         this architecture were completely different than any prior art.
    23
    24
         And so we believed that we would want to patent the
    25
         architecture at some point.
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- 1 Q. And did Egenera ultimately get a patent?
- 2 A. We did.
- Q. Is that the patent that's at issue in this case, the '430?
- 4 | A. The '430 patent, yes.
- 5 Q. Did Egenera ever develop the product?
- 6 A. Absolutely.
- 7 Q. What was the product?
- 8 A. The product was called BladeFrame.
- 9 Q. Would you describe it at the highest level?
- 02:23 10 A. BladeFrame was a combination of hardware and software that
 - 11 enabled all of these features that we talked about. It was a
 - 12 rack of blades and control blades and other components that
 - enabled this architecture that we talked about. The software
 - 14 | was called PAN Manager, and that was how you actually used the
 - 15 PAN.
 - 16 Q. Just to be clear, what's the difference between hardware
 - 17 and software?
 - 18 A. Well, hardware is a physical device that you can touch and
 - 19 feel and see. Software is really either -- you can describe it
- 02:23 20 | as code or instructions that runs on computers and hardware to
 - 21 do a particular function, whether it's a business function or
 - 22 whether it's, you know, enabling an architecture like this.
 - 23 Q. Let me put up a photograph, if I might.
 - 24 What does this show?
 - 25 A. Yeah. This brings back good memories. This was actually

- 1 the hardware team showing off our serial number one of the
- 2 BladeFrame.
- 3 Q. Is that you in the middle here?
- 4 A. Yeah. I was a little heavier there, I think, but that's
- $5 \, | \, \text{me.}$
- 6 0. And without the beard?
- 7 A. Yeah. And a little younger looking too.
- 8 Q. When did Egenera first start selling its BladeFrame
- 9 system?
- 02:24 10 A. Later in that year, 2001, towards the end of the year.
 - 11 Q. Did the product that is BladeFrame, that PAN Manager
 - 12 software, in early days did it do what you hoped it would do?
 - 13 A. It did. This was -- for me personally this was an amazing
 - 14 process because we went from an idea to actually seeing this
 - 15 product and having customers actually implement it. It was
 - 16 really amazing.
 - 17 Q. So you had that first commercial product in what time
 - 18 frame?
 - 19 A. I think our first customer was probably October of 2021.
- 02:25 20 | It may have been a beta test, I'm not exactly sure.
 - 21 Q. What was the year?
 - 22 A. 2001. I'm sorry.
 - 23 Q. Thank you. You went from idea to product in less than --
 - 24 A. About a year and a half, I think. Yeah.
 - 25 Q. So after Egenera had the first commercial product in fall

- 1 | 2001, was that it? Did you stop making improvements?
- 2 A. No. For, you know, even until today Egenera is still
- 3 around. They're constantly making improvements to the product.
- 4 Q. So how was your BladeFrame product received in the
- 5 industry when it first came on sale?
- 6 A. Very well. I had -- you know, we had actually very
- 7 demanding customers. Our first customers were banks, some of
- 8 the trading systems and things like that which is a little bit,
- 9 you know, amazing that a small company here in Massachusetts
- 02:26 10 | could, you know, could provide the resource that, you know, in
 - 11 a system that would make customers feel that they could run
 - 12 those kinds of applications on this system. It was -- so
 - 13 customers were immediately attracted to the product and started
 - 14 buying it right away.
 - 15 Q. So what would happen if a major bank running a trading
 - 16 system had its system crash for ten minutes?
 - 17 A. Well, I knew very well from my role there that you could
 - 18 lose millions or -- I know it sounds crazy, but in some cases
 - 19 even billions of dollars with systems being down.
- 02:26 20 | Q. You're saying you knew very well from your days at?
 - 21 A. At Goldman.
 - 22 Q. Let's talk about your customers. Can we put up JTX
 - 23 | 266 please, slide 12?
 - 24 | Would you just quickly step us through what this is depicting?
 - 25 A. This is a diagram that's kind of talking about our

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1 customers in the different segments, they're called market
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- 2 | segments, that they're in. Obviously at the top you see a lot
- 3 of capital markets and banking. A lot of large banks,
- 4 investment banks, Credit Suisse First -- they used to be Credit
- 5 Suisse First Boston. They were our first customer. Standard
- 6 Charter, Goldman Sachs, Divar Securities. They're all large
- 7 banks that really relied upon their system staying up at the
- 8 time.
- 9 We also had health care. Emory, Emory Health. They ran their
- 02:27 10 hospitals on our system down at Emory. We had
 - 11 telecommunications providers. We had universities. We had
 - 12 even the public sector; the 2010 census ran completely on
 - 13 | Egenera systems. So we had really great customers that were
 - 14 very demanding and very delighted by our product.
 - 15 Q. Was Egenera successful right away or did it take time?
 - 16 A. You know, it felt like it was absolutely right out of the
 - 17 gate. We were -- it was nonstop. It was a crazy growth
 - 18 environment. And it was right out of the gate.
 - 19 Q. Did you open other offices?
- 02:28 20 A. We did very quickly. In 2002 we opened an office in the
 - 21 UK. In 2003 we opened an office in Japan. In 2004 we opened
 - 22 an office in Germany.
 - 23 Q. So as a startup was your goal profitability?
 - 24 A. No. By design we were trying to invest in the business by
 - 25 | taking the profits, if you will, that we were making and

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1 | pouring that back into R&D, making the product better and
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- 2 better, growing our market presence around the world and, you
- 3 know, getting more great customers like this. And that's a
- 4 very common approach for a venture capital startup to, you
- 5 know, in the first ten years even of companies like ours.
- 6 Q. Industry praise, were you receiving any of that in those
- 7 early days?
- 8 A. Yeah, a lot of industry praise. Yeah. And most of it was
- 9 because the press or folks were talking to our customers that
- 02:29 10 were all delighted.
 - 11 Q. All right. Well, let's pull up some examples. Let's
 - 12 start with PX BYX which is also JTX 474. The title here is,
 - "Egenera founder Vern Brownell honored as an entrepreneur of
 - 14 the year by Ernst & Young."
 - 15 Do you remember this award, sir?
 - 16 A. I do very well.
 - 17 Q. What can you tell us about it?
 - 18 A. Ernst & Young is a large accounting firm and they have an
 - 19 entrepreneur-of-the-year program. And although this honored me
- 02:29 20 personally, it really wasn't about me, it was about the company
 - 21 and what we had accomplished. I enjoyed this process because
 - 22 we actually had to talk to other entrepreneurs that had been
 - 23 successful in the industry and they kind of grilled you. And
 - 24 it was a competitive process. So eventually I won this award.
 - 25 Q. Are you proud of this one?

- 1 A. Yeah.
- 2 Q. Let's look at PX BYW also designated JTX 475. So this
- 3 | says, "Egenera is named to the Red Herring 100." Do you see
- 4 that?
- 5 A. I do.
- 6 Q. And do you remember this award?
- 7 A. Yeah. "Red Herring," I don't think they're around
- 8 anymore, but it was a very prestigious technology, broad
- 9 business journal, magazine, and they recognized the top 100
- 02:30 10 | companies, both, all publicly held companies and privately held
 - 11 companies. So we were recognized for our innovation and
 - 12 business strategy and won this award.
 - 13 Q. So this says in the second paragraph, "The Red Herring 100
 - 14 recognizes the top fifty public and the top fifty private
 - 15 companies," and it goes on from there. So you were one of
 - 16 those top fifty privates?
 - 17 A. Yes, we were.
 - 18 Q. Okay. Let's look at PX BZJ, which is also JTX 476.
 - 19 A. Right.
- 02:31 20 | Q. The title here is, "Yankee Tech Ventures names Egenera CEO
 - 21 Vern Brownell innovator of the year." Do you remember this
 - 22 award?
 - 23 A. I do.
 - 24 Q. What can you tell us about this?
 - 25 A. Yankee Tech was an investor -- I don't think they're

- 1 around anymore, but they were an investor in Cambridge. And
- 2 they recognized us, or recognized me -- but again it wasn't me,
- 3 it was the team that did all the work -- recognized me as the
- 4 innovator of the year.
- 5 Q. Did Yankee Tech actually invest in Egenera?
- 6 A. They did, yeah.
- 7 Q. Was the award biased because of that?
- 8 A. No. They had lots of other portfolio companies that they
- 9 could have given the same award to. So I was proud of this as
- 02:32 10 | well.
 - 11 Q. Let's take a look at PX BZI, which is also JTX 477. The
 - 12 title here says, "Taking on the Titans, virtual servers give
 - 13 Egenera traction." Do you see that?
 - 14 A. Yes.
 - 15 Q. This is an article in what publication?
 - 16 A. It's the "Boston Business Journal."
 - 17 Q. All right. And then you are down at the -- I believe it's
 - 18 the eighth paragraph, you were quoted, it's about
 - 19 three-quarters of the way down that first page. Would you read
- 02:32 20 those quotes, please?
 - 21 A. Sure. It says, "I spent a lot of time as a large Sun
 - 22 customer over time rolling out a large number of servers and
 - 23 converting our data infrastructure to Sun. So I knew what it
 - 24 was like from a customer perspective and what the cost drivers
 - and pain points were."

- 1 Q. And this is referring to your days when?
- 2 A. When I was at Goldman. Most of those boxes that you --
- 3 that we put in data centers at the time were Sun servers. Sc
- 4 that's what it refers to.
- 5 Q. Can we go to the second paragraph, first sentence. Would
- 6 you read that quote, please?
- 7 A. It says, "Instead of spending days to set up our provision
- 8 server, engineers can do it with Egenera's technology in a
- 9 matter of minutes. Once an application is finished operating,
- 02:33 10 the processing resources it was using are freed up for use by
 - 11 others."
 - 12 Q. And would you unpack that for the jury? What does that
 - mean to you?
 - 14 A. That goes back to what we were talking before about being
 - able to freely move blades from one set of applications to
 - another without having those trapped islands of capacity.
 - 17 Q. Do you agree that's a fair summary there?
 - 18 A. Yeah.
 - 19 Q. If we look at the third paragraph it references reducing
- 02:33 20 product costs. And how did your architecture do that? If so.
 - 21 First of all, did it?
 - 22 A. It did. And it did in different ways, depending on the
 - 23 customer. But I would say that all of our customers saw cost
 - 24 advantages over the way they were doing things previously with,
 - 25 you know, the racks of servers and all the cabling and all the

- 1 complexity.
- 2 Q. And then let's go to the fourth paragraph, talks about
- 3 | some customers. Would you just read that list?
- 4 A. Yeah, it says the company, I guess Egenera, has about
- 5 fifty customers, including big names such as AOL Time Warner,
- 6 that was a big name if you remember, but JP Morgan Chase,
- 7 | Credit Suisse and Goldman Sachs.
- 8 Q. How did you feel about having amassed those kinds of
- 9 customers?
- 02:34 10 A. It was really exciting to me. It was very -- it was
 - 11 probably the most rewarding thing to see our product being used
 - 12 for critical applications in some of the most important
 - 13 customers in the world. That was very gratifying to me and the
 - 14 | whole team.
 - 15 O. Let's take a look then at PX BZH, which is also JTX 478.
 - 16 A. Yes.
 - 17 Q. Could you just read the title and subtitle at the top?
 - 18 A. Sure. Well, this is InformationWeek, which is a computing
 - 19 data center periodical. It says, "A fresh approach to
- 02:35 20 | technology. Online grocer FreshDirect revamps its
 - 21 infrastructure with blade servers and virtualization to ensure
 - 22 high availability and scalability."
 - 23 Q. What do you understand that to be directed to?
 - 24 A. Well, FreshDirect was actually the world's first online
 - 25 grocer. They started in New York and grew. And they had a

- 1 very demanding window where they were putting all their orders
- 2 together. And they had really high standards in terms of they
- 3 | needed to keep their systems up or they weren't going to be
- 4 | able to deliver those orders out to all over Manhattan and New
- 5 York and so on. And so they needed the high availability.
- 6 They needed the scalability.
- 7 Q. Let's turn to the second page, second full paragraph.
- 8 Would you please read that highlighted portion?
- 9 A. Yeah. It says, "After evaluating systems from IBM,
- 02:36 10 | Hewlett Packard and others, the company decided on BladeFrame
 - 11 servers from Egenera."
 - 12 Q. Now, in this time period were HP and IBM competitors of
 - 13 each other?
 - 14 A. HP and IBM and Sun and others were basically providers of
 - 15 computer servers. So the box, we used to call them pizza
 - 16 boxes. The pizza boxes that went into the racks, traditionally
 - 17 architected computer servers. None of them had a solution like
 - 18 BladeFrame.
 - 19 Q. You heard Mr. Desmarais say that competition from HP
- 02:36 20 mortally wounded Egenera?
 - 21 A. I don't even remember HP being a competitor at all,
 - 22 anytime. There might have been one account or something where
 - 23 we went up against them but we never saw HP as a competitor.
 - 24 Q. If we could look at the last paragraph on page 2, would
 - 25 you read that highlighted passage, please?

- A. Yeah. It says, "Before the Egenera server installation, the average response time on the FreshDirect website was about 8 seconds. Today the response time is 2 seconds during peak demand, and 1 second during low-demand periods."
- Q. So how did your architecture enable that change in response time?

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- A. Well, a couple things. One is we had this very high-speed fabric that was part of the system. But we also had the ability for them, in their peak demand periods, to take blades that were used for something else and apply them to this, in this window. So they had -- I forget what it was, like in the morning or in the evening people would primarily order their stuff and, you know, their demand would go way up on their website. But it would trail off later in the day. And they could move those servers to more the production side where they're actually in the factory making goods and, you know, these robots running around.

 So it was that ability to move those resources around that was
- So it was that ability to move those resources around that was able to get one of the things that they got.
- Q. Let's look at the next page. Would you read that highlighted portion, please?
 - A. It says, "Using the blade servers and virtualization,

 FreshDirect has straightforward redundancy to guard against

 system downtime and the hot swap capabilities of the blade ease

 the need for hardware changes." It's from Miles Tractenberg,

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1
         who was their CIO.
     2
              So would you please explain to the jury what those
         references are, "redundancy" and "hot swap capability"?
     3
              It was very important to FreshDirect, although you
     4
     5
         wouldn't think, like, you know, I mean, this is sort of like my
         bias maybe that an online grocer isn't, like, the most
     7
         demanding application. But they had very tight windows.
         high availability was very important to them. And this system
         could not go down or they would effectively lose a whole day's
     9
02:39 10
         worth of orders. Everyone in Manhattan wouldn't get their
    11
         groceries. That would be pretty bad. So they ran their entire
    12
         computer systems on our product because we had that
    13
         availability.
    14
         And then the hot swapper refers to if there was a problem with
         one of the blades you could have a spare blade in the chassis
    15
         and it would automatically fail that and then you could repair
    16
         the other one later on or get another one from us.
    17
              Let's pull up PX BZL, which is also JTX 479. The title
    18
         Ο.
    19
         here says, "Egenera BladeFrame honored by Oracle as Titaned
         Partner Solution of the Year." Then it refers to this
02:39 20
    21
         FreshDirect account. What was this award?
    22
              So Oracle is one of the largest software companies in the
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24 FreshDirect, had used Oracle's database server. So they were 25 keeping all their data in Oracle's database server on our

world. We had partnered with them. This customer,

- platform. So we worked together as a partner and we won this award. Oracle gave us this award.
- Q. All right. Let's put up, please, PX BZC, which is also
- 4 JTX 480.
- 5 A. This one I'm going to need the glasses for.
- 6 Q. Yeah. This is a little harder to read. Now it's pulling
- 7 up. So the title at the top is, "Egenera Named Best Blade
- 8 | Solution by Waters Magazine." What was "Waters Magazine"?
- 9 A. "Waters Magazine" was -- is a periodical that primarily
- 02:40 10 covers financial IT technology, although they're a little
 - 11 broader than that.
 - 12 | O. And what was the award?
 - 13 A. It was for the best server solution. I think we won that
 - 14 two years in a row from them.
 - 15 Q. Let's take a look at the second paragraph. This is what
 - 16 you just referenced, second year in a row. And then this next
 - 17 clip, would you read that highlighted language, please?
 - 18 A. Yes, sure. It says, "This year Egenera has been honored
 - 19 not only for its ability to outperform other players in the
- 02:41 20 | industry, but for also maintaining what Waters" -- they
 - 21 described -- "as an 18 to 24-month technology lead over its
 - 22 competitors."
 - 23 Q. Did you believe you had that kind of a lead?
 - 24 A. Yeah, we did. Absolutely.
 - 25 Q. And then could we look at the next sentence, please?

- 1 A. It says, "An early trailblazer in the utility computing
- 2 | market, Egenera has introduced the first new server
- 3 architecture in a generation."
- 4 Q. First new server architecture in a generation. What did
- 5 that mean to you?
- 6 A. I mean, to me it meant this was the first departure from
- 7 the way data centers had been traditionally architected for at
- 8 least the past ten or twenty years. And credit to the team and
- 9 what we had done.
- 02:42 10 Q. What did it mean to you to be described as the first new
 - 11 server architecture in a generation?
 - 12 A. I was very proud of that and proud of the team that did
 - 13 it.
 - 14 Q. Could we look, please, at PX BZM, which is also JTX 481.
 - 15 What is this document?
 - 16 A. This is a press release that refers to the fact that we
 - 17 | won an award. So there was a magazine called "Network World."
 - 18 It was a big magazine, when they had magazines, that was very
 - 19 prestigious in the networking and computing world. And every
- 02:42 20 year they came out with an issue of 200 best products and
 - 21 companies. And we were on their list of ten network startups
 - 22 to watch.
 - 23 Q. So you were one of the top ten?
 - 24 A. We were one of the top ten.
 - 25 Q. Could we look, please, at PX AAF, also JTX 482? And can

- 1 | we look at -- there's a passage describing Egenera's being
- 2 selected as network servers and peripherals winner.
- 3 What was this about?
- 4 A. This was an award for having the best competitive process
- 5 looking at who had the best servers and peripherals in that
- 6 category. And we won that award.
- 7 Q. And then could we look at the last paragraph? Would you
- 8 read that highlighted language, please?
- 9 A. It says, "Egenera's BladeFrame is the most innovative
- 02:43 10 solution in the network servers and peripherals category."
 - 11 Q. Was that a meaningful award to you?
 - 12 A. That was an important one. I remember that one pretty
 - 13 clearly.
 - 14 Q. Let's look at PX BGZ, also JTX 483. And here the title
 - 15 is, "Egenera Awarded Best Virtualization Solution at Blade
 - 16 Systems Insight"?
 - 17 A. Yes.
 - 18 | Q. And what does the byline say?
 - 19 A. It says, "Senior level attendees award Egenera top honors
- 02:44 20 for innovation and business value."
 - 21 Q. And what was this award?
 - 22 A. So this was a trade show called Blade Systems Insight, and
 - 23 the people at the trade show that were, you know, customers and
 - 24 executives from various customers awarded us top honors here
 - 25 for innovation and business value.

- 1 Q. All right.
- 2 A. "Best Virtualization Product" it was called.
- 3 Q. Let's look at that first paragraph. Would you read that
- 4 highlighted language, please?
- 5 A. Yeah. "Nominated and voted on solely by attendees, the
- 6 Insight award for best virtualization solution recognizes the
- 7 most innovative virtualization solution that drives business
- 8 value for end users."
- 9 Q. So this was 2008?
- 02:45 10 A. Yeah. Yeah.
 - 11 Q. So nearly seven years after your first BladeFrame was
 - 12 introduced?
 - 13 A. That's right.
 - 14 Q. Were you surprised you were still getting innovation
 - awards that much longer after your product had first been
 - 16 released?
 - 17 A. I really wasn't surprised because I had -- you know, I was
 - 18 always talking to customers, and customers always told me, You
 - 19 have the best product and you have the best support for that
- 02:45 20 product. And I was always very proud of that.
 - 21 Q. So stepping back, did you consider the work that you did
 - 22 at Egenera to be innovative?
 - 23 A. Yes.
 - 24 Q. And you -- and what about the BladeFrame product itself,
 - 25 innovative?

- 1 A. Yep, I think it was. Yeah, very innovative.
- 2 Q. And did you want to protect that innovation?
- 3 A. Yes, very much so.
- 4 Q. And Egenera's '430 patent is the reason we're here today?
- 5 A. Yes.
- 6 Q. Let's just put up that patent now, briefly. If we could
- 7 just look at the first two named inventors. You're that first
- 8 one?
- 9 A. Yeah, Vern Brownell.
- 02:46 10 Q. And who's the second one?
 - 11 A. Pete Manca.
 - 12 Q. And he's going to talk to the jury later?
 - 13 A. Yeah, yeah.
 - 14 | Q. Are you a patent expert?
 - 15 A. I'm not. I really am not.
 - 16 Q. Does Egenera have someone to talk to the jury who is?
 - 17 A. We do. We have Dr. Jones, who is both a patent expert and
 - 18 an expert in his field.
 - 19 Q. When you applied for the '430 patent what did you intend
- 02:46 20 it to cover?
 - 21 A. This one we intended to cover the overall architecture,
 - 22 the overall concept of how we would accomplish all of those
 - 23 things that we talked about earlier.
 - 24 Q. Let's shift gears now and talk about the defendant, Cisco.
 - 25 You understand that in this lawsuit Egenera is accusing Cisco

- 1 of infringing the '430 patent?
- 2 A. Yes.
- 3 Q. And what is the accused product?
- 4 A. It's called Unified -- UCS, or Unified Computing System.
- 5 Q. And when UCS was introduced, did you have a view as to UCS
- 6 vis-à-vis BladeFrame?
- 7 A. Well, certainly when it was introduced I had a very strong
- 8 reaction to what I saw. My blood was boiling.
- 9 Q. Okay. Let me come back to that high-level reaction, but
- 02:47 10 | did you have -- let me just put it this way: Did you have
 - reasons for that strong reaction? Do you have a list of them?
 - 12 A. Yeah. Well, I think there's primarily four reasons that I
 - 13 was very upset. I can go through them.
 - 14 O. Please do.
 - 15 A. So the first of which was -- we heard some of this
 - 16 earlier -- that Cisco had asked for meetings with us to dive
 - 17 deep into the technology and understanding of the technology.
 - 18 We spent many hours with them answering any of their questions.
 - 19 Those meetings were under NDA, and effectively we guided their
- 02:48 20 product development for UCS.
 - 21 The second was that they hired, you know, I think it was three
 - 22 dozen of our people away from us, folks that had very strong
 - 23 understanding of the product and the technology.
 - 24 The third was the -- basically, the product. When you looked
 - 25 at what UCS claimed to do versus the Egenera system, it was

- 1 uncannily, eerily the same words almost, and targeting that
- 2 market. And I think I missed a point there.
- Q. Did Cisco also have access to a BladeFrame?
- 4 A. Yes. And of course we talked about earlier around the
- 5 same time frame they ordered a system from us and, you know, we
- 6 | were pretty convinced they were experimenting with it, causing
- 7 it to crash and other things.
- 8 Q. All right. Let's come back to that first point about
- 9 meetings between Egenera and Cisco, early 2004 time frame.
- 02:49 10 A. Yes.
 - 11 Q. So before the face-to-face meeting that Mr. Thomases
 - 12 referenced, were there phone calls?
 - 13 A. There were a number of phone calls, yes.
 - 14 Q. Who were you talking with?
 - 15 A. I spoke with Ammar Hannafi, with Ed Chapman, with Soni
 - 16 Jiandani. There may have been others as well.
 - 17 Q. All right. Let's put up JTX 267. What is this document?
 - 18 A. This is a document that we put together at Egenera to
 - 19 summarize what we had all heard from Cisco. Because they were
- 02:50 20 | reaching out to all of us in different ways. And we were about
 - 21 to do a meeting, a pretty important meeting with them and we
 - 22 | wanted to summarize what we had learned in our conversations
 - 23 with Cisco.
 - 24 Q. So this is before the April 2004 meeting?
 - 25 A. Right. This encapsulates what Cisco had told us about

- their desires in the meeting and kind of their desires in the marketplace as well.
- Q. All right. Let's look at page 008.
- 4 MR. BATCHELDER: And could we put some red boxes
- 5 around a few of these names, Mr. Fitzgerald?
- 6 Q. So upper left-hand corner, who's that?
- 7 A. Upper left-hand corner, that's Ammar Hannafi, head of New
- 8 Business Ventures.
- 9 Q. You talked to him before this?
- 02:51 10 A. Yes, I did. I spoke to Ammar a number of times.
 - 11 Q. Just so the record is clear, did you speak with him by
 - 12 phone before the April 2004 meeting?
 - 13 A. I did, yes.
 - 14 Q. Okay. And what did you talk with him about?
 - 15 A. He wanted to -- he basically wanted to have this deep-dive
 - 16 meeting. First he expressed he was very interested in Egenera.
 - 17 He was interested. He was impressed with the work that we had
 - 18 done. Very effusive in his complimentary attitude. He's a
 - 19 very affable guy, I remember that. And he said that he was
- 02:51 20 | interested in either a deep partnership or even potentially
 - 21 acquiring Egenera. And that was the -- what I considered the
 - 22 | call that was the reason that we set up this April 15th, 2004
 - 23 meeting.
 - 24 Q. And did the subject come up of the relationship that Cisco
 - 25 | had with data centers when you talked with Mr. Hannafi?

- A. Yes. He also mentioned to me that Cisco was not in the

 data center server business, and they felt left out. And they

 were looking for a strategy to become -- to enter into the data

 center server business. And they saw Egenera as a potential
- 5 way of doing that, a partnership or acquisition of Egenera.
- Q. So the middle box on this slide a couple of names you just mentioned, Soni Jiandani and Ed Chapman, and underneath each of those entries, what does it say there?
- 9 A. It says, "Looking to certify on Egenera for Cisco storage 02:52 10 due to some impending deals."
 - 11 Q. Under each name it says, "Met with Vern"?
 - 12 A. Oh, I'm sorry. "Met with Vern." I met with both of
 - 13 those.
 - 14 Q. Let's look at page -- let's see. Oh, I'm sorry. Let me
 - 15 just ask you, so when you met with or at least talked with
 - 16 Ms. Jiandani and Mr. Chapman, at a high level what did you
 - 17 discuss?
 - 18 A. Again, they were very complimentary about what we'd done.
 - 19 They had learned from some of our folks about Egenera. They
- 02:53 20 | had even spoken to some of our customers. They were praising
 - 21 what we had done and very interested in building a relationship
 - 22 with us.
 - 23 Q. All right. Let's take a look at PX BXB.
 - 24 (Whereupon counsel conferred.)
 - 25 Q. And what are we looking at here?

- 1 A. This is also an email from Pete Manca to myself and Scott
- 2 Geng. Scott is one of the -- was one of the senior engineers,
- 3 engineering managers at Egenera.
- 4 Q. And let's look at the list of folks there, attendees from
- 5 Cisco, and you see that list there?
- 6 A. Yeah. So here Pete is -- well, Ray Wu from Cisco is
- 7 telling Pete who's going to be coming from Cisco.
- Q. Okay.
- 9 MR. BATCHELDER: For the record, I'm sorry, let me
- 02:54 10 just say this exhibit also is designated JTX 484.
 - 11 Q. You mentioned a moment ago that there was an NDA in place
 - 12 here. Would you please explain to the jury what you're
 - 13 referencing by an NDA?
 - 14 A. Yeah. A non-disclosure agreement is kind of an agreement
 - 15 between two parties that they won't, you know, they won't
 - 16 violate or disclose the confidential information that is talked
 - 17 | about in the meeting or in any of the interactions that you
 - 18 have between the two companies. So we had a mutual
 - 19 non-disclosure agreement here that we wouldn't show their
- 02:55 20 secrets and they wouldn't use or show our secrets.
 - 21 Q. So the effective date here on the first couple lines is
 - 22 February 2004?
 - 23 A. Yes.
 - 24 Q. And in your understanding then did this NDA cover your
 - 25 April 2004 meeting?

- 1 A. Yes, absolutely. We wouldn't have had that meeting if we
- 2 didn't have an NDA.
- 3 Q. Let's then talk about that meeting. Where was it?
- 4 A. It was at our headquarters. We had at that time moved
- 5 from the dentist's office to Marlborough. We had a real
- 6 office. It was in our conference room in Marlborough.
- 7 Q. Who led the conversation?
- 8 A. Pete -- I believe Pete led most of, if not all the
- 9 presentation.
- 02:56 10 Q. Pete Manca?
 - 11 A. Pete Manca.
 - 12 Q. And you attended too?
 - 13 A. Yes, I was there for most of it.
 - 14 | O. And what was discussed?
 - 15 A. It was a pretty exhaustive talk of how the architecture
 - 16 worked. First, there was some background in what we were doing
 - 17 and how we did it. And then it got more into a deep dive of
 - 18 the technology, the techniques and what we did. It wasn't
 - 19 just -- there was -- I think it was sixty-eight slides that we
- 02:56 20 had in our presentation. But there were a lot of good deep
 - 21 questions on the part of the Cisco folks.
 - 22 Q. How much interest did the Cisco delegation express to you
 - 23 about your technology?
 - 24 A. I remember the meeting -- I remember some of this very
 - 25 | clearly. There was -- they were sort of on the edge of their

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They were, like, very interested in what we could --
     1
     2
         you could see that in their eyes, in the way they acted, the
         way they took notes, and the way they asked questions. A lot
         of, lot of questions.
     4
     5
         Q.
              Let's pull up JTX 263. What are we looking at here?
              This is the actual briefing deck that I kind of a little
     7
         referred to before for the meeting with Cisco.
     8
              And was the entire deck presented at the meeting?
         Q.
              I believe most of, if not all of it was presented, yes.
02:57 10
         Ο.
              And let's look at page 019. We've seen this picture
    11
         before, but what was Egenera explaining to Cisco here?
    12
              Well, in some sense, you know, we needed to kind of review
    13
         the marketplace. I know it sounds a bit, you know, bragging,
    14
         like I'm bragging or whatever. This slide, although it's
         simple, it did remind people of some of the problems with a
    15
    16
         data center. The same slide that, you know, I used to describe
    17
         to you. It wasn't clear at the time what some of these data
         center problems were. So this is kind of eye opening for
    18
    19
         Cisco. It seemed like they were, you know, again at the edge
02:58 20
         of their seats and taking a lot of notes and so on.
    21
              And just to level set, at this time did Cisco have a
    22
         presence in the data center marketplace?
    23
              All they did -- they have a huge, huge business in
         Α.
```

computer networking devices in the data center and some

computer storage networking. But they had no presence, and I

24

- dare say, I don't mean to be presumptuous, but not a really
- 2 good understanding of the server market in general. It was
- 3 something they weren't experienced with, had no products in,
- 4 and were eager to learn.
- 5 Q. Let's look at JTX 263, page 025. We're back to your
- 6 islands of capacity?
- 7 A. Yeah.
- 8 | Q. And you used that to explain what to Cisco?
- 9 A. Sorry. I think it just went -- it flipped. But, yeah,
- 02:59 10 the same concept that we talked about earlier, the islands of
 - 11 capacity. And, again, what some of the issues were with these
 - 12 trapped processing resources and inability to reuse resources
 - 13 fluidly and so on. And all of that resonated with them.
 - 14 Q. I'm sorry. I think I misspoke on the number. This
 - 15 is 022.
 - 16 But now let's turn to 025. At the top what did you say here?
 - 17 | What's the title?
 - 18 A. This is us making the point that in order to do this
 - 19 effectively, in order to wrestle the complexity and all the
- 02:59 20 | underlying problems we talked about earlier, same problems that
 - 21 we talked to you folks about, you needed a new architecture.
 - 22 You needed a new clean-sheet-of-paper design that enabled a new
 - 23 architecture for the data center.
 - Q. Let's look at slide 009. What was this used to explain to
 - 25 Cisco?

```
So this is a slide that refers to some of what I talked
     1
         about but in a different way. Up at the top you see different
     2
     3
         applications. At a business you might have your trading
         systems or your e-commerce systems, and so on. Different
     4
     5
         applications. And then down at the bottom you have these pools
         of resources. And the resources that we had talked about are
     7
         processors, SAN storage and network connections. You really
         want to be able to fluidly get, you know, allow your e-commerce
         application to use part of that pool, or your trading system to
03:00 10
         use part of that pool. It was the virtualization software, the
    11
         PAN Manager that we showed here, and all the capability around
    12
         it that allowed that pooling of resources, enabled that
    13
         pooling.
    14
              Did you also explain some benefits of your architecture?
              We did. We went through a lot of the same benefits that
    15
         Α.
         we talked about earlier.
    16
              Let's take a look at slide 008. Does this list some of
    17
         those?
    18
    19
         Α.
              Yes.
```

19 A. 165.

21

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23

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25

03:00 20 Q. Would you walk the jury through them, please?

A. So, you know, this was a couple years -- you know, some of these slides were maybe slightly different numbers in TCO. But at the time, you know, our customers were seeing a reduction in -- I'm sorry. TCO is a buzz word, "total cost of

ownership." So the total cost of what it takes to maintain a

- 1 set of servers and data center infrastructure in a data center.
- 2 That includes the equipment, the people to maintain it, the
- 3 cost of it over time, how quickly it breaks, the reconfiguring
- 4 and everything. So it's a buzz word that we use in the
- 5 industry.
- 6 So the total cost of ownership that our customers would see
- 7 | would be reduced by up to half, 50 percent, which was pretty
- 8 dramatic.
- 9 Q. So these slides, was this all the content that was
- 03:01 10 | conveyed to Cisco in that meeting?
 - 11 A. No. There were, I think, sixty some odd slides. And
 - 12 these were really a lot of the introduction. What I did notice
 - is, you know, these were the things that they were excited
 - 14 about. They were excited about the whole presentation, but it
 - 15 seemed to me that they were very engaged and interested in what
 - 16 we were doing.
 - 17 Q. And beyond the slide deck itself was any information
 - 18 conveyed?
 - 19 A. There were, as I said, lots of questions, white board
- 03:02 20 discussions. I remember thinking to myself, you know, yeah, I
 - 21 know this is an NDA conversation but we have some of our
 - 22 engineers talking, they get very excited, they go deep, they
 - 23 disclose everything. And I was just trusting that, you know,
 - 24 yeah, we are under NDA but we're probably going too deep here.
 - 25 Q. After this April 2004 meeting were there other meetings

- 1 between Egenera and Cisco?
- 2 A. There were. I know Pete went out to California and met
- 3 with them and there were conversations like that.
- 4 Q. And after that set of meetings then, what happened with
- 5 Egenera and Cisco?
- 6 A. After Pete's meeting?
- 7 Q. Yeah.
- 8 A. They went totally dark on us. They would not return our
- 9 phone calls, emails. Completely dark.
- 03:03 10 Q. Did you get an explanation?
 - 11 A. Never. From no one.
 - 12 Q. When UCS came out, did you see a press release from Cisco
 - 13 about it?
 - 14 A. Yeah, I did.
 - 15 Q. Let's pull up PX BGX, please.
 - 16 And is this the website that you saw?
 - 17 A. Yeah, it is.
 - 18 Q. And down at the bottom it's newsroom.cisco.com/press
 - 19 release; is that right?
- 03:04 20 A. Yes. This is off of their website, their own press
 - 21 release.
 - 22 | O. And the date shown is?
 - 23 A. It looks like April 19th, 20 -- no, sorry. March 16th,
 - 24 2009.
 - 25 | Q. And that was right around the time UCS was marketed?

- 1 A. That would have been the formal release of UCS.
- 2 Q. Okay. And you read this at the time. What was your
- 3 reaction?
- 4 A. Well, I mean, so many different levels. I mean, like even
- 5 the first line, "Cisco today unveiled an evolutionary new data
- 6 center architecture." The words, it was clear this is the
- 7 product where they were going to enter into the data center
- 8 architect -- data center, you know, the computing environment.
- 9 And as I started to read, it just more and more mimicked
- 03:04 10 everything that we said to our customers, everything that we
 - showed them at the various meetings that we had.
 - 12 Q. So that architecture that's referenced in the very first
 - 13 line, who invented it?
 - 14 A. This architecture we invented.
 - 15 Q. And who taught it to Cisco?
 - 16 A. We taught it to Cisco.
 - 17 Q. It then references the full power of virtualization. Who
 - 18 developed that architected way to virtualize data centers?
 - 19 A. We developed the use of virtualization in the data center
- 03:05 20 | in a very unique way that nobody else had at the time. And now
 - 21 Cisco had that based on what we had told them.
 - 22 Q. Then it goes on to say that, "UCS bridges the silos in the
 - 23 data center into one unified architecture using industry
 - 24 standard technologies."
 - 25 Who came up with that idea?

A. Egenera.

- 2 Q. And who taught it to Cisco?
- 3 A. Egenera.
- 4 Q. It then talks about some advantages of UCS.
- 5 MR. BATCHELDER: Can we turn to that one,
- 6 Mr. Fitzgerald? On the second page?
- 7 Q. Yeah. So here, "Reduces total cost of ownership, improves
- 8 IT productivity, increases scalability, without added
- 9 complexity, improves energy efficiency, interoperability." Who
- 03:06 10 | identified those advantages to the architecture you've been
 - 11 describing?
 - 12 A. Those are exactly very -- we taught all -- Cisco all of
 - 13 those.
 - 14 | Q. Let's look on page 4. There's a reference to SavaS.
 - 15 Please highlight that name, SavaS?
 - 16 A. Yeah, so this particular --
 - 17 Q. Let me ask you a question to make sure we have a clear
 - 18 record.
 - 19 When you saw this reference to SavaS, what was your reaction?
- 03:06 20 A. This one got me even more upset than the rest of the
 - 21 release. Because SavaS was an Egenera customer. And the only
 - 22 customer that Cisco, out of all the customers they potentially
 - 23 had, the only customer they had quoted in the release, in the
 - 24 important release of their UCS product was an Egenera customer,
 - 25 a good Egenera customer that we had worked with for a long

- 1 time. That's what Cisco quoted in their first press release.
- 2 I couldn't believe it. Not only did they steal our
- 3 architecture, steal our product, steal our people, this was the
- 4 first stealing of our customers. I was outraged and still am.
- 5 Q. Backing up, sir, how did Egenera do as a company after the
- 6 financial crisis?
- 7 A. We were trying to climb out of it and did reasonably well.
- 8 I think we were hit with the financial crisis about the same as
- 9 any other company. But we had the situation where a lot of our
- 03:07 10 customers were Wall Street customers, and they were really hit
 - in the financial crisis. Several of them, you know, went out
 - 12 of business. So that really -- it did impact our action. But
 - despite all those headwinds we still had a good business.
 - 14 Q. And then UCS came out?
 - 15 A. And then UCS came out and everything changed.
 - 16 Q. Changed how?
 - 17 A. They were basically competing in the marketplace with our
 - 18 product against our customers, which we had taught them to
 - 19 build.
- 03:08 20 | Q. Ultimately you were on the board of Egenera but you ceased
 - 21 being an employee?
 - 22 | A. Yeah. I left in 2009.
 - 23 Q. But you stayed on the board of directors?
 - 24 A. I stayed on the board until 2017.
 - 25 Q. And where did you go?

- 1 A. I went to a company called D-Wave Systems, which was --
- 2 which is a quantum computing company, very -- completely
- 3 different technology. Also a very innovative company, but in a
- 4 completely different space.
- 5 Q. And did Cisco's conduct have any impact on your decision
- 6 to leave Egenera?
- 7 A. Yeah. There were a lot of reasons but certainly, you
- 8 know, the fact that we were aggressively being competed with by
- 9 a company who was predatory and stealing our employees and, you
- 03:09 10 know, using a product that we had told them how to design. You
 - 11 know, the opportunity at Egenera at that point, once UCS came
 - 12 out, was more limited. And this was just a better opportunity
 - 13 for me personally.
 - 14 Q. So you're -- you said, I think, you were on the board
 - 15 until 2017?
 - 16 A. Yes.
 - 17 | Q. This lawsuit was filed in 2016?
 - 18 A. I believe that's correct, yes.
 - 19 Q. And did you vote to bring this suit?
- 03:09 20 A. I did.
 - 21 Q. Why?
 - 22 A. Well, by that time, you know, we very reluctantly -- this
 - 23 | was a hard decision for Egenera. We didn't want to bring it to
 - 24 the court. We thought very carefully about it, whether it made
 - 25 sense to do this. It was a big step for us as a small company.

```
1
         It was a very complex process, as you know. So we considered
         it. But, you know, at that point we had no recourse. Cisco
     2
         had destroyed our product, our market, our customers, our --
     3
         you know, hired our people away. And we had -- they left us no
         choice. So we entered into this lawsuit.
     5
                  MR. BATCHELDER: Your Honor, pass the witness.
     7
                  THE COURT: All right. Cross-examination?
     8
                  MR. PACKIN: Yes, your Honor. Just so I could plan
         for a good breaking point, what time is the Court planning
03:10 10
         on --
    11
                  THE COURT: I'd like to break at twenty of 4:00 to get
    12
         the jurors on the road before 4:00. So you have
    13
         thirty minutes.
    14
                  MR. PACKIN: Thirty minutes. Got it. Yes, sir.
         Bear with me for one moment.
    15
                   (Pause in proceedings.)
    16
    17
                                 CROSS-EXAMINATION
         BY MR. PACKIN:
    18
    19
         Q.
             Good afternoon, Mr. Brownell.
03:12 20
         Α.
             Good afternoon, sir.
    21
             Now, we heard a lot from you about Cisco taking secret
    22
         stuff under the NDA; right?
    23
             Uhm-hmm.
         Α.
    24
         Q.
             And you showed us the NDA?
    25
         Α.
              Yes.
```

- 1 Q. The NDA is a contract?
- 2 A. Yes, an agreement. Uhm-hmm.
- Q. You understand, sir, that this is a patent case; right?
- 4 A. Yes, I do.
- 5 Q. It's not an NDA case; right?
- 6 A. Yes.
- 7 Q. And you also talked about employees; right?
- 8 A. I did.
- 9 Q. It's not a theft-of-employees case; right?
- 03:12 10 A. We're providing background on the predatory practices of
 - 11 the company.
 - 12 Q. What this case is about is about patent infringement;
 - 13 right?
 - 14 A. Also this shows the motivation of why the company would
 - 15 infringe on the patent.
 - 16 Q. Sir, what the jury needs to do is compare UCS to the
 - 17 | claims; right?
 - 18 A. Yeah. And I'm -- yes. And I'm confident that as they do
 - 19 that, they will see that Cisco did, in fact, infringe on the
- 03:13 20 patent.
 - 21 Q. There's one patent at issue in this case; right?
 - 22 A. The '430, yeah.
 - 23 | Q. And you can't really comment on patent litigation because
 - 24 you're not an expert on patent litigation; right?
 - 25 A. That's correct, yes.

- 1 Q. And we already covered, we saw in the video earlier, in
- 2 order to infringe a patent you need to compare the product to
- 3 the claims; right?
- A. Yes, of course.
- 5 Q. And you understand --
- 6 A. And Mr. Jones will be doing that.
- 7 Q. Sir, if you just stick with my questions it will go
- 8 quicker.
- 9 A. Sure.
- 03:13 10 Q. You understand that the product at issue is called UCS;
 - 11 right?
 - 12 | A. I do.
 - 13 Q. And you're not an expert on UCS; right?
 - 14 A. I know UCS pretty well as a ex-data center customer. And
 - 15 I've looked at all of the literature that they provided in the
 - 16 marketplace.
 - 17 Q. Sir, you're not an expert on UCS; true?
 - 18 A. I'm not a expert on UCS. I --
 - 19 Q. Thank you.
- 03:14 20 A. -- am a very well-educated person with regard to UCS.
 - 21 Q. You understand that UCS was released to the public in
 - 22 | 2009; right?
 - 23 A. Yes. It was the worst kept secret in the marketplace.
 - 24 But, yes, it was.
 - 25 Q. And you said your blood was boiling when you heard about

- 1 the UCS announcement. You told us the dates in March of 2009;
- 2 right?
- 3 A. That's right.
- 4 Q. You said when you saw the press release you knew it was
- 5 exactly like Egenera; right?
- 6 A. Yes.
- 7 Q. Okay. Let's take a look at what Egenera was saying
- 8 internally in 2009.
- 9 MR. PACKIN: If I could have the Elmo, please. Oh, I
- 03:14 10 have it.
 - 11 Q. Okay. So this is March 19th, 2009; right?
 - 12 A. Yes.
 - 13 Q. And this is an Egenera internal confidential document;
 - 14 right?
 - 15 A. Yes.
 - 16 Q. Okay. Let's look at what Egenera is saying about the
 - 17 announcement. We see what was announced and it talking about
 - 18 UCS; right?
 - 19 A. I'm not sure what this BMC software refers to. Maybe you
- 03:15 20 | could tell me about that. It says something about BMC
 - 21 software.
 - 22 Q. What was announced, UCS; right? Do you see that, sir?
 - 23 A. Yes.
 - 24 | Q. And under "Technology" what Egenera was saying internally
 - 25 | was, "Technology, the hardware component is entirely of Cisco

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1
         design." Does the document say that, sir?
     2
              This is a summary of some marketing literature that
         somebody at Egenera had copied just to say what Cisco was
         saying in the marketplace. Those weren't Egenera's words,
     5
         those were Cisco's words that were put into the presentation to
         illuminate that.
     7
              Okay. Let's look at what Egenera was saying about how
         BladeFrame compared to UCS at the time. We see right here. It
         says the same presentation. And just for the record, I don't
03:16 10
         know that I said the number, JTX 28. Same presentation, last
    11
         page.
    12
                  MR. BATCHELDER: I'm sorry to interrupt, your Honor,
         but can we have the exhibit number on that prior document?
    13
    14
                  MR. PACKIN: Same document. I'm sorry.
    15
              We see here there's a bar on the bottom, lower performance
         versus higher performance; right? We see a scale on the
    16
         bottom, sir. Do we see that?
    17
    18
              Yeah. I have no idea where this diagram, where this
         Α.
    19
         diagram came from. This could have been a Cisco diagram --
             Sir --
03:16 20
         Ο.
    21
         A. -- that we had put into that presentation.
    22
                  MR. BATCHELDER: I'm sorry to interrupt. Can the
    23
         witness be presented with a full copy of the document in hard
    24
         copy so he has it?
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THE COURT: Very well.

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1 Q. Sir, here you go.
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2 (Handing.)

- 3 A. Thank you.
- 4 Q. Now, we see the BladeFrame --
- 5 A. By the way, I have not seen this document.
- 6 O. I understand.
- We see the BladeFrame right here; right?
- 8 A. Yeah. I don't know who created those graphics. I don't
- 9 know if they're Cisco graphics or Egenera graphics. I can't
- 03:17 10 comment.
 - 11 Q. This says Egenera BladeFrame; right?
 - 12 A. I don't know where they came from or who made that
 - conclusion.
 - 14 Q. Okay. And the conclusion that's shown here is that Cisco
 - is higher performing than Egenera?
 - 16 A. That might have been Cisco's conclusion and this is a
 - graphic from Cisco's literature.
 - 18 O. This is Egenera's confidential document?
 - 19 A. No. This is just a diagram that was on -- it was an
- 03:17 20 | internal document that was describing something. I don't even
 - 21 know what it was describing. But when you start showing me
 - 22 pictures like that, it's unclear who the author of the picture
 - 23 was.
 - 24 Q. Okay. In 2009, in that time frame, when UCS was released,
 - 25 you did not compare it with any Egenera patent; true?

- 1 A. I'm sorry. Say that again?
- 2 Q. In the 2009 time frame when UCS was released, you didn't
- make any effort to compare UCS with any Egenera patent; true?
- 4 A. Me, you're saying?
- 5 Q. You. You, Mr. Brownell.
- 6 A. I'm not a patent expert.
- 7 Q. Did you make an effort or not?
- 8 A. No. Why would I?
- 9 Q. And you were a member of the board in 2016 when this
- 03:18 10 | lawsuit was filed; right?
 - 11 A. I was.
 - 12 Q. And at that time you never made an effort to compare it
 - 13 with the patent, right, UCS with the patent?
 - 14 A. Again, why would I?
 - 15 Q. And you never personally compared UCS to the patent;
 - 16 right?
 - 17 A. Not to the patent. I had a very good understanding of the
 - 18 | functionality that was listed in all the literature that was in
 - 19 the public domain, exhaustive literature from Cisco about UCS.
- 03:19 20 | I read it in a lot of detail. And I understand, even though we
 - 21 talked about earlier I may not be an expert in UCS, I
 - 22 understand UCS probably as well as any of Cisco's customers.
 - 23 Q. Okay. So --
 - 24 A. And so I compared the functionality, the attributes, what
 - 25 the system was claiming to do, all of that. The things that

you were telling our customers about UCS, I knew those very
well. But I didn't go around checking the patent against it.

The patent is something that is, a lot like the judge said
earlier, it's a deed. A deed to your home. Do you, like, take
out the deed from your home and look at it once in a while?

No. You put it in your drawer, you make sure it's safe, and it's a protection against, you know, someone trying to violate your property.

Q. Sir, you said you knew all this detail about UCS, the architecture, how it worked technically; you knew all that from public information?

- 12 A. I knew as much as was possible by public information.
- 13 Q. Okay. Now, we're talking --

03:20 10

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03:20 20

- 14 A. And I'm a pretty technical person.
- Q. I understand. We're talking about the patent here. Just to be clear, you're not qualified to compare a patent linked to a product; true?
 - A. I am not a patent attorney. I am not an expert in patents. Dr. Jones will be talking a lot about the patent itself and how it compares to Cisco. I had no information internally to even look at on what Cisco was doing. I only had the public-available records. And I was not doing a comparison of the patent to the D-Wave. I was doing a comparison of -- sorry, D-Wave -- Egenera's product to UCS, Egenera's product, namely our BladeFrame, which is actually an implementation.

- 1 There's very many ways to implement what's covered in the
- 2 patent. But that's an implementation of what you could do with
- 3 that patent.
- 4 Q. Okay. Sir, you never told someone at Cisco that Cisco's
- 5 UCS product was infringing Egenera's patent; true?
- 6 A. Why would I do that? I mean, I -- awaken a sleeping giant
- 7 to open ourselves to even more retribution from Cisco saying --
- 8 Q. We're just trying to figure out, did you do it or not?
- 9 A. **Did I --**
- 03:21 10 Q. Did you ever notify Cisco or tell Cisco that Cisco's UCS
 - 11 product was infringing Egenera's patent?
 - 12 A. No, I didn't. And it would be insane to do that.
 - 13 Q. And you also don't know of anyone at Egenera contacting
 - 14 Cisco about the alleged theft of the patent until this case was
 - 15 filed in 2016; right?
 - 16 A. Cisco is a very large company with a lot of resources. We
 - were a small company, don't have the ability to awaken a
 - 18 sleeping giant and have them even more aggressively attack our
 - 19 company.
- 03:22 20 Q. So you didn't reach out; right?
 - 21 A. So as far as I know, no one reached out to tell Cisco that
 - 22 they were infringing on our patent at that time frame.
 - 23 Q. Okay. Let's talk about your patent. That's what this
 - 24 case is about, this '430 patent; right?
 - 25 A. **Uhm-hmm**.

- 1 Q. Now, you are the lead inventor right here on the top of
- 2 the patent; right? That's you?
- 3 A. Yeah. It fuzzy now, but --
- 4 Q. Let me put it on auto focus. There we go.
- 5 That's you; right?
- 6 A. **Yeah**.
- 7 Q. Brownell at the top, lead inventor. You're also listed
- 8 right here?
- 9 A. It says Brownell, et al. So it's all of us.
- 03:22 10 Q. And Egenera is the assignee; right?
 - 11 A. Correct.
 - 12 Q. That's your company?
 - 13 A. Yeah -- well, it was.
 - 14 | Q. Right?
 - 15 A. It was, yes.
 - 16 Q. And just to be clear, the jury's going to be looking at
 - 17 this patent. You know that, sir; right?
 - 18 A. Oh, yes, of course.
 - 19 Q. So let's talk about what you know about the patent. We're
- 03:23 20 going to get to the other stuff but let's start with the
 - 21 patent.
 - 22 You didn't write the specification? You didn't write the
 - 23 patent; right?
 - 24 A. No. You -- as it showed in the video this morning, an
 - 25 inventor typically works with a lawyer or patent agent or

- 1 someone who is familiar with patent law to draft a patent.
- 2 So --
- 3 Q. And, in fact, sir -- we're trying to break by 3:40, sir.
- 4 In fact, sir, you don't know how your idea is written in the
- 5 patent and how it's structured; that's beyond your expertise,
- 6 right?
- 7 A. I was involved in the drafting of the patent with the
- 8 assistance of legal help. So --
- 9 0. Sir --
- 03:23 10 A. -- I have input to the patent.
 - 11 Q. Let me ask a very clear question so we can know the
 - 12 answer. How your idea is written in this patent and how it's
 - 13 structured is beyond your expertise; true?
 - 14 A. Yes.
 - 15 Q. And your lawyers, they just asked you questions; right?
 - 16 A. **Yes**.
 - 17 Q. And they could have asked you any questions they wanted
 - 18 to; right?
 - 19 A. **Uhm-hmm**.
- 03:24 20 Q. You prepared with them before you gave your testimony?
 - 21 A. Yeah, briefly. Yeah.
 - 22 Q. And you didn't get into any detailed questions about the
 - 23 patent; right?
 - 24 A. No. Because, again, I'm not a patent expert. We have
 - 25 Dr. Jones who will be able to answer all the patent questions.

- 1 | Q. Okay.
- 2 A. **Yeah**.
- 3 Q. So and you understand that Cisco also has an expert;
- 4 right?
- 5 A. I would assume so.
- 6 Q. You understand that he disagrees with Dr. Jones?
- 7 A. I don't know.
- 8 Q. You have no idea?
- 9 A. Well, I don't know your expert and I haven't heard his 03:24 10 testimony, so I don't know.
 - 11 Q. Okay.
 - 12 A. All I heard was the opening argument.
 - 13 Q. Let's stick to the patent here. Let's just make sure we
 - 14 know what you have to contribute regarding the patent because
 - 15 that's a key issue in this case. You understand that, sir;
 - 16 right?
 - 17 A. Yeah, sure. Absolutely.
 - 18 Q. You don't know how the patent is drafted; right?
 - 19 A. I know exactly how the patent was drafted. I was part of
- 03:25 20 the process of doing it.
 - 21 Q. You don't know what's contained in the patent; right?
 - 22 A. I read the patent both when it was prosecuted, when -- you
 - 23 know, after it was granted, and I read it actually, you know,
 - 24 recently. You know, recently as well. But I'm not an expert
 - 25 who contributed --

- 1 Q. You gave a deposition in this case, sir?
- 2 | A. I did, yes.
- Q. That was our chance to ask you questions?
- 4 A. Uhm-hmm.
- 5 Q. And let's take a look at what you said at your deposition.
- 6 Oh, let me -- I'll hand you a copy over here.
- 7 (Handing.)
- 8 Q. I'm going to -- at that deposition we asked you questions.
- 9 You swore to tell the truth; right?
- 03:26 10 A. I did, yes.
 - 11 Q. Just like you did now?
 - 12 A. **Yes**.
 - 13 Q. Okay. Let's go ahead and play -- it's page 155, line 24.
 - 14 Let's go ahead and play clip B23.
 - MR. PACKIN: Oh, I think Mr. Herzka will need the
 - 16 screen.
 - 17 (Video played.)
 - 18 "QUESTION: Are you saying here today you cannot tell me what
 - 19 is -- any component that is unique to Egenera in any --
- 03:26 20 | "ANSWER: I can tell you all the components from a product
 - 21 point of view. I can't tell you about how the patent is
 - 22 drafted, what's contained in the patent, how it's written, how
 - 23 it's put together. I could tell -- I'm happy to talk all day
 - 24 long about the product, if you wish."
 - 25 Q. Now, the claims of the patent, they're in the back; you

- 1 know that?
- 2 A. Yes.
- 3 Q. And at your deposition you couldn't answer any questions
- 4 | about the claims; right?
- 5 A. Because I was saying the same thing that I'm saying here
- 6 and that I'm not an expert on the patent. And I didn't
- 7 actually have Dr. Jones to refer to, but Dr. Jones will be
- 8 talking about the patent.
- 9 Q. Okay. With respect to yourself, you couldn't tell us what
- 03:27 10 you contributed to the invention; right?
 - 11 A. I know -- I know that I have contributed. I don't know --
 - 12 I couldn't tell you how it's manifested in the patent exactly.
 - 13 Q. So, for example, the jury's considering claim 3 in this
 - 14 case. You don't know one way or another what your contribution
 - 15 was to claim 3; right?
 - 16 A. Well, I certainly could, if I had to, get back and
 - familiar with the patent to the level that I was when it was
 - 18 drafted, when I was part of that process. It would take, you
 - 19 know, quite a while to do that but I could do that.
- 03:27 20 Q. You can't do that sitting here today; right?
 - 21 A. No, I haven't educated myself on the patent and I'm not a
 - 22 patent expert.
 - 23 | Q. In general, you're aware that an idea has to be new or
 - 24 unique in order to get a patent; right?
 - 25 A. Yes.

- 1 Q. And you told us a little bit -- I'm sorry, but at your
- 2 deposition you couldn't identify any component that was unique
- 3 to Egenera in any claim of the patent; right?
- 4 A. I doubt that I said that from the point of view of the
- 5 patent. Yes, from the point of view of the patent. But from a
- 6 product, as you saw on the deposition, I can talk about the
- 7 product and how it works and the technology aspects of it and
- 8 how it's implemented. I can't -- unfortunately, I can't talk
- 9 about the patent because I'm not a patent expert. I'm not that
- 03:28 10 lawyer.
 - 11 Q. The reason you can't talk to us about the patent is
 - 12 because you don't understand how a patent works; right?
 - 13 A. No. I know how the technology works, at a great level,
 - 14 so --
 - 15 Q. Let's look at your --
 - 16 A. -- when you say I don't understand how the patent works, a
 - 17 patent is a legal document. I'm not a lawyer. I don't
 - 18 understand how -- the technicalities, how a patent is drafted.
 - 19 Q. Sir, sir --
- 03:29 20 A. I understand the technology quite well and quite deeply.
 - 21 Q. Okay. Sir, let's just be very clear. You don't
 - 22 understand how the patent works; true? Yes or no.
 - 23 A. Yes, true. I don't understand how a patent works. I'm
 - 24 not a patent lawyer.
 - 25 Q. And, in fact, at your deposition you couldn't answer any

- question; anything to do with the patent you were not able to answer, right?
- 3 A. Anything to do with the patent, you saw there, I did not
- 4 answer. I told the gentleman that was doing my deposition that
- 5 I'm happy to answer anything about the product, anything about
- 6 the technology at any level of detail. I'm still quite
- 7 technical. I understand the technology quite well. I am just
- 8 not a patent attorney.
- 9 Q. Okay. Let's talk about the product. That's what you want
- 03:29 10 to talk about; right?
 - 11 A. Uhm-hmm.
 - 12 Q. Now, let's look at JTX -- if I could have the Elmo.
 - 13 That's good. JTX 216. I'll grab it.
 - 14 Now, this is one of the documents that you just showed to the
 - 15 jury; right?
 - 16 A. Yeah. This is that original presentation that was created
 - a few months after the company was started.
 - 18 Q. In June 2000, you were the founder and CEO at that time;
 - 19 right?
- 03:30 20 A. Yes.
 - 21 Q. You were heavily involved in what was going on at the
 - 22 company; right?
 - 23 A. Yes.
 - 24 Q. Let's go to another slide here. This is the page ending
 - 25 in 6354. It's a little bit hard to see because it's a black

- 1 document.
- 2 And on this page what we see is your envisionment of the
- 3 BladeFrame architecture; right?
- 4 A. Yes. So this was a description. This was, as I said, a
- 5 few months after I founded the company.
- 6 Q. Right.
- 7 A. Probably before I even hired engineers. It was really
- 8 just kind of a first draft of what we were thinking about.
- 9 Q. Sort of the key --
- 03:31 10 A. What I was thinking about.
 - 11 Q. Sort of the key --
 - 12 A. I don't even know if I had other employees at this time.
 - 13 Q. The key architectural issues, you were using the word
 - 14 "architecture" vis-à-vis some --
 - 15 (Simultaneous speakers.)
 - 16 A. Maybe not, you know, this was the first presentation so I
 - don't know how many times I used architecture.
 - 18 Q. So let's -- during your direct you were telling us during
 - 19 your testimony --
- 03:31 20 (Simultaneous speakers.)
 - 21 A. Oh, I thought during the presentation.
 - 22 Q. Okay. So let's look at the first thing in the top left
 - 23 here. It says, "Sophisticated Linux kernel-level mods."
 - 24 Right? Do you see that?
 - 25 A. Yeah. Yeah.

- 1 Q. And, now, "mods" stands for "modifications"; is that
- 2 right?
- 3 A. That's right, yeah.
- Q. And Linux, that's an operating system?
- 5 A. Yeah. It's an open-source operating system. Very popular
- 6 in the days --
- 7 (Simultaneous speakers.)
- 8 Q. Operating system, we sometimes call that an OS, for short?
- 9 A. Yes, exactly.
- 03:32 10 Q. And the operating system, these types of operating system
 - 11 modifications that you are doing, they were not an easy thing
 - 12 to do; right?
 - 13 A. Well, let me just give you some background here for, you
 - 14 know --
 - 15 Q. Sir --
 - 16 A. I just want to --
 - 17 Q. I'm just asking, were they easy --
 - 18 A. It requires a little bit of background to talk about what
 - 19 this refers to.
- 03:32 20 The Linux operating system, at the time, was very immature and
 - 21 not really used in the data center environment that much. We
 - 22 | had a lot of customers that were concerned about using Linux.
 - 23 I was a big fan of using Linux. So we did, in fact, have to
 - 24 make -- which is very typical -- modifications to improve the
 - 25 | reliability of Linux. And I think that's what this refers to.

- Q. You needed a special team to do those complicated operating-system modifications; right?
- 3 A. We had an operating systems team, yeah, of course.
- 4 Q. Okay. So let me actually, like, let me write these couple
- 5 things down here before we keep going, make sure we get it
- 6 right.
- 7 | So I'm going to write here, start at the top here, write
- 8 "Complicated operating system modifications." That's what we
- 9 were just talking about; right?
- 03:34 10 A. I believe I said Linux modifications to improve its
 - 11 reliability that may, in fact, be complicated. But they were
 - 12 designed to improve Linux's --
 - 13 Q. I understand. We're going to get there, we're going to
 - 14 build, but let's take it one step at a time. Okay?
 - 15 A. Okay.
 - 16 Q. All right. So let's start, "Egenera BladeFrame
 - 17 | architecture." This is Mr. Brownell. "Complicated OS
 - 18 | modification." And we're going to dive in, don't worry. I
 - 19 know you want to dive into this technology. We're going to get
- 03:35 20 there.
 - 21 A. Again, for clarification, none of that work had been done
 - 22 at that time. The product was just being conceived at that
 - 23 time.
 - 24 Q. I understand. Eventually you did do it though?
 - 25 | A. We did --

- 1 Q. We have it in --
- 2 A. OS modifications, I don't know how complicated they were,
- 3 but that's fine.
- 4 Q. Okay. Let's talk about that team that you had. If we can
- 5 pull up -- actually, I'll do it here. Or maybe Mr. Herzka --
- 6 MR. PACKIN: Could you go back to Mr. Herzka, please?
- 7 Q. We're at JX 216. If we can go to page 26. Let's talk
- 8 about the team that helped you with these modifications. Now,
- 9 the first person there is Mr. Milne; right?
- 03:36 10 A. It's a bit of a technicality, but I don't know if these
 - 11 people had anything to do with -- they probably weren't working
 - 12 on that. I'm not sure what those OS modifications were and I
 - don't know if any of these people were involved in that.
 - 14 Q. Let's talk about the team that had the OS experience,
 - 15 okay?
 - 16 A. But I don't know that they were the folks that did that
 - 17 work.
 - 18 Q. Let's look at Egenera's team. Mr. Milne, he had fifteen
 - 19 years plus experience of OS Linux design?
- 03:36 20 A. This is some of the early members of the team that I'm
 - 21 very proud of that built BladeFrame, the entire system.
 - 22 Q. Okay. And then the second one here is Paul Curtis; right?
 - 23 A. Uhm-hmm.
 - 24 Q. And he had nineteen years of experience with the Unix
 - 25 kernel; right?

- 1 A. Yeah. Be aware, that's Unix not Linux. So there's a
- 2 difference there.
- 3 Q. Got it.
- 4 A. You might understand that.
- 5 Q. Okay. Let's go to the next slide, see some other people.
- 6 You had Mr. Greenspan, right, and he also had twenty years
- 7 experience in Unix, not Linux, right, or with the kernel?
- 8 A. I don't really know what he did there, but he's a great
- 9 software engineer.
- 03:37 10 Q. The kernel is the core part of the operating system; is
 - 11 that right?
 - 12 A. It depends on the operating system that you're talking
 - 13 about but it could be, yeah.
 - 14 Q. Okay. And now Mr. Geng, he had sixteen years of
 - 15 experience designing Unix operating systems; right?
 - 16 A. Yes.
 - 17 Q. And Mr. Geng, I think you mentioned he was a software
 - 18 manager, eventually he became the CTO of Egenera; right?
 - 19 A. That's my recollection, yeah.
- 03:37 20 Q. Even though you had your great team, the product was not
 - 21 perfect; right?
 - 22 A. No product is ever perfect.
 - 23 Q. In the early 2000s there were some technical disadvantages
 - 24 to your approach; right?
 - 25 A. Not that I'm aware of.

1 Now, you showed us a slide earlier about the product being highly scalable. Do you recall that? It's in this set. 2 Yes, uhm-hmm. That was a design attribute. Α. But when we asked you about scalability at your 4 Ο. 5 deposition, you told us that scalability was a meaningless term; isn't that true? 7 No, because we were having a long, drawn out discussion in the deposition about terminology and I was asking for a clearer definition of what you were asking. It was like a two-hour 03:38 10 long discussion about terminology in the computer business. 11 Okay. Scalability, you just told the jury the system was 12 scalable; right? 13 There's different kinds of scalability. The gentleman Α. 14 that was doing the deposition was talking more about mainframe type scalability, is my recollection. 15 Why don't we go to page 117 of your deposition, line 18. 16 It's B83. 17 18 MR. HERZKA: Could you clear your screen, please? 19 MR. PACKIN: Yes, sir. 03:39 20 THE COURT: Let's do this and then we'll be taking a 21 recess for the day. 22 MR. PACKIN: Yes, sir. 23 (Video played.)

"QUESTION: Did those companies that provided those traditional

components advertise scalability as an attribute?

24

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"ANSWER: I don't know why you're focusing on scalability.
     1
     2
         That was like -- that's a meaningless term. It really doesn't
     3
         mean anything technologically."
     4
                  MR. PACKIN: Okay. Did you want to break, your Honor?
     5
                  THE COURT: Yes. I promised the jurors twenty of
         4:00.
     6
     7
         All right. Jurors, we'll just have to wait on this mystery
         until tomorrow when we continue with the cross-examination.
         Remember, we're going to have breakfast set out for you just
         after 8:00 tomorrow. We'll start roughly at 9:00. We'll take
03:39 10
         a little time, we're going to get right going so like today we
    11
    12
         keep on it.
    13
         All right, the jury is excused.
    14
                  THE CLERK: All rise.
    15
                  (The jury left the courtroom.)
                  (Proceedings adjourned.)
    16
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CERTIFICATE

We, Debra Joyce and Cheryl Palanchian, Court Reporters for the United States District Court for the District of Massachusetts, do hereby certify that the foregoing pages are a true and accurate transcription of our shorthand notes taken in the aforementioned matter to the best of our skill and ability.

/s/James P. Gibbons 08/2/2022 JAMES P. GIBBONS

/s/ Debra M. Joyce 8/2/2022 DEBRA M. JOYCE

/s/ Cheryl Palanchian 8/2/2022 CHERYL PALANCHIAN

INDEX

<u>WITNESS</u> <u>PAGE</u>

VERN J. BROWNELL

Direct Examination 71
By Mr. BATCHELDER
Cross-Examination 122
By Mr. Packin

OPENING STATEMENT BY MR. THOMASES p. 22 OPENING STATEMENT BY MR. DESMARAIS p. 51